MILITARY MANPOWER TRAINING REPORT FY 1993

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FY 1993 MMTR

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FY 1993 MILITARY MANPOWER TRAINING REPORT

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EXECUTIVE SUMMARY

The Military Manpower Training Report (MMTR) of the Secretary of Defense is submitted to the Congress in accordance with Section 138(d)(2) of Title 10, United States Code. The Secretary of Defense is required to submit to Congress a written report each fiscal year recommending student loads for each category of individual institutional training for each active and reserve component of the armed forces as justification for, and explanation of, the recommended student load. The FY 1993 Military Manpower Training Report specifically supports the Department of Defense request for authorization of military student training load for each component, active and reserve, of each Service for Fiscal Years 1992 and 1993. Please note that many calculations in this report are affected by rounding.

TABLE 1. Requested Training Load

	FY 1992	FY 1993
Active Components		
Army	59,296	60,269
Navy	53,383	51,405
Marine Corps	18,975	19,016
Air Force	<u>27,707</u>	<u>27,971</u>
Subtotal	<u>159,361</u>	<u>158,661</u>
Reserve Components		
Army National Guard	13,171	10,529
Army Reserve	13,693	12,583
Naval Reserve	1,824	1,892
Marine Corps Reserve	3,108	3,418
Air National Guard	3,004	3,048
Air Force Reserve	<u>1,514</u>	1,529
Subtotal	<u>36,314</u>	<u>32,999</u>
Total	195,675	191,660

The requested load is derived from the President's Budget for FY 1993 and the Department of Defense request for authorization of military manpower strengths, active and reserve. Military student load authorizations enacted by Congress are subject to adjustments, as prescribed by the Secretary of Defense, to be consistent with service component end strengths authorized by Congress.

Definitions and Explanation of Training Load

This report discusses individual training and education within the Department of Defense provided by military service training and education institutions. Individual training and education, for purposes of this report, is divided into six categories:

- Recruit Training, given to enlisted entrants who have not had previous military service.
- One-Station Unit Training, an Army program which combines Recruit Training and initial Specialized Skill Training into a single course.
- Officer Acquisition Training, which leads to a commission in one of the Services.
- Specialized Skill Training, which prepares military personnel for specific jobs in the Military Services.
- Flight Training, which prepares prospective pilots and navigators for an initial operational assignment.
- <u>Professional Development Education</u>, relating to the advanced professional duties of military personnel or to advanced academic disciplines to meet Service requirements.

"Training load" is the average number of students and trainees participating in formal institutional training and education courses during the fiscal year. For a full fiscal year, training load is the equivalent of the student/trainee man-years of the participants, including both those in temporary duty and permanent change of station status.

The requirement for training is derived from the need to replace losses in each skill required in the military force structure. Losses, through separations, promotions and other causes, are projected at various points in the future and compared to the projected inventory of trained personnel. The deficit between the requirement in each skill and the inventory becomes a demand for newly trained personnel. A phased input of students to the training establishment is then scheduled so that trained personnel, in each skill and skill level, are available at the proper time to replace the losses in those skills. The resulting workload is the basis of the training load addressed in this report.

The training load for each component is the measure of the amount of training required for members of that component, although some of the training will be done by other Services, in DoD schools or, in some cases, by institutions outside the Department of Defense. The training of members of the Reserve Components included in the report is the formal school training provided by the active training establishment to individual members of the Reserve Components while they are on active duty for training. This is

primarily training provided to non-prior service personnel entering the Reserve Components.

An Overview of Training Load

For FY 1993 total requested DoD training load is 191,660. About 82 percent of this training load is for members of the active forces. The remaining 18 percent is training for members of the Reserve Components on active duty at training establishments operated by the Active Components. Whenever possible, Reserve Component personnel attend the same classes and are provided the same instruction as Active Force personnel.

Table 2 displays the distribution of total Active Force and Reserve Component load attributable to each of the major categories of training in FY 1992 and FY 1993.

TABLE 2. Distribution of Training Load

	FY 1992	FY 1993
Training Category		
Recruit Training	39,660	39,436
One-Station Unit Training (Army)	9,266	9,293
Officer Acquisition Training	19,435	19,546
Specialized Skill Training	111,053	106,938
Flight Training	4,744	4,595
Professional Development Education	11,517	11,852
Total	195,675	191,660

The largest categories of training, in terms of training load, are Recruit Training and Specialized Skill Training, both of which, along with Army One-Station Unit Training, are strongly influenced by the number of enlisted non-prior service accessions. Specialized Skill Training is the largest training category for FY 1993 with 59 percent of the Active Force load and 56 percent of the Reserve Component load.

Table 3 divides the requested training load for FY 1992 and FY 1993 into two parts: (1) accession-related training which provides civilian entrants with the initial skills needed to perform the duties of their first military occupations; and (2) other training which is conducted to prepare members for more specialized duties in later stages of their military careers.

For FY 1993, training related to new accessions amounts to about 64 percent of all training programmed for the Active Forces. Only about 37 percent is for other subsequent training. For the Reserve Components, the percentages are about 85 and 15, respectively. The load dedicated to accession-related requirements highlights the priority the military services place on training new military members. Detailed information on each category of training is provided in Chapters III through VII of this report.

TABLE 3. Accession-Related Training (Thousands)

	FY 1992		F	Y 1993
	Active	Reserve	Active	Reserve
Accession Related Load	<u>Forces</u>	Components	<u>Forces</u>	Components
Recruit	30.8	8.9	31.7	7.7
One-Station Unit Training	5.2	4.1	5.6	3.7
Officer Acquisition	17.7	1.8	17.8	1.8
Initial Skill (Off & Enl)	43.2	15.7	43.4	14.2
Undergraduate Flight	<u>3.5</u>	0.5	<u>3.4</u>	0.5
Subtotal	<u>100.4</u>	<u>31.0</u>	<u>101.9</u>	<u>27.9</u>
Other Training Load				
Other Specialized Skill	47.4	4.7	45.0	4.4
Other Flight	.5	0.1	0.5	0.2
Professional Development	<u>11.1</u>	<u>0.5</u>	<u>11.3</u>	0.5
Subtotal	<u>59.0</u>	<u>5.3</u>	<u>56.8</u>	<u>5.1</u>
Total Load	159.4	36.3	158.7	33.0
Accession Related Load as Percent of Total Load	63%	85%	64%	85%

Manpower In Support of Individual Training

Individual training requires manpower to conduct and support instruction, manage military schools and training centers, maintain training bases, and provide support to students, military staff members and their dependents. Chapter VIII of this report provides information about the military and civilian manpower needed for individual training. Manpower in support of individual training for FY 1992 and FY 1993 is shown by Service in the following table.

TABLE 4. DoD Manpower in Support of Individual Training By Service
(End Strength, Thousands)

	FY 1992			FY 1993		
	Mil		Total	Mil	Civ	Total
Army	41	25	66	38	24	62
Navy	32	9	41	31	8	39
Marine Corps	12	1	13	11	1	12
Air Force	<u>21</u>	<u>10</u>	<u>31</u>	<u>20</u>	<u>10</u>	<u>30</u>
Total	106	45	151	100	43	143

Manpower in support of individual training is continuing to decrease through FY 1993. Table 5 provides a breakout for each manpower function.

TABLE 5. DoD Manpower in Support of Individual Training By Function
(End Strength, Thousands)

	FY 1992			FY 1993		
	Mil	<u>Civ</u>	<u>Total</u>	Mil	Civ	Total
Conduct of Individual Training a/	84	18	102	80	18	98
Base Operating Support	21	25	46	19	23	42
Training Headquarters	_1	_2	_3	_1	_2	_3
Total	106	45	151	100	43	143

a/ All individual training categories are included. The manpower includes instructors, instructional support, school/training center administration, student supervision and direct training support.

Funding for Individual Training

The funds required to support training for FY 1993 total \$14.7 billion. This includes pay and allowances for the students and trainees undergoing training, pay and allowances of military and civilian personnel in support of training, operations and maintenance costs, and training related procurement and construction. Table 6 displays total training costs to include the Defense Health Program previously funded in the Services.

<u>TABLE 6. Funding of Individual Training (All Appropriations) by Service</u>
(\$ Millions)

	FY 1992	FY 1993
Army	\$5,660	\$5,411
Navy	4,963	4,799
Marine Corps	1,306	1,349
Air Force	3,155	3,039
Defense Health Program	83	102
Total	\$15,167	\$14,700

A breakout of the funding by categories of cost shows that reductions in training support account for much of the decrease between FY 1992 and FY 1993. This is part of a continuing effort to reduce support costs and improve the efficiency of training. Table 7 shows the funding for each of the major categories of training and for related support.

TABLE 7. Funding of Individual Training (All Appropriations) by Category (\$ Millions)

	FY 1992	FY 1993
Recruit Training	\$ 1,252	\$ 1,295
Officer Acquisition Training	545	542
Specialized Skill Training	4,747	4,776
Flight Training	2,511	2,406
Professional Development Education	888	835
Army One-Station Unit Training	308	313
Medical Training	246	235
Acquisition Trng	0	72
Direct Training Support	864	798
Training Management Headquarters	144	141
Training Base Support	2,792	2,444
Reserve Component Pay and Allow	870	843
Total	\$15,167	\$14,700

Funding estimates are based on data contained in DoD's Future Years Defense Program (FYDP). The MMTR is consistent with resource estimates in the President's Budget, the justification material submitted to the Congress, the FYDP and internal DoD management documents. Further detail on training funding is provided in Chapter IX, Appendix D and Appendix E of this report.

Congress has expressed a specific interest in the Operations and Maintenance Appropriation for individual training and education. As a result, Appendix E provides further details and compares the MMTR to the President's Budget Operations and Maintenance Overview.

Trends in Individual Training

This section provides information on the five-year trend of individual training load, workload, manpower and funding. Three years of actual data are provided to compare with the two budget year-estimates. It should be noted that significant decreases in training load were made in FY 1991. Slight load increases over FY 1991 levels are needed to sustain the new force levels for FY 1992 and FY 1993. Resources continue to decrease through the five-year period as training becomes more efficient.

Table 8 shows the FY 1989 to FY 1993 trend in training load for each Active and Reserve Component.

TABLE 8. Active and Reserve Training Load Trends by Service (Thousands)

		Actuals			nates
	FY 89	FY 90	FY 91	FY 92	FY 93
Active Components					
Army	72.7	71.4	54.4	59.3	60.3
Navy	64.0	71.2	57.2	53.4	51.4
Marine Corps	17.8	20.0	18.2	19.0	19.0
Air Force	<u>29.4</u>	30.5	<u>25.8</u>	27.7	28.0
Subtotal	183.9	193.1	155.6	159.4	158.7
Reserve Components					
Army National Guard	14.2	17.6	12.2	13.2	10.5
Army Reserve	12.2	15.3	11.2	13.7	12.6
Naval Reserve	2.7	2.3	2.1	1.8	1.9
Marine Corps Reserve	3.3	4.4	2.9	3.1	3.4
Air National Guard	2.4	2.2	2.1	3.0	3.1
Air Reserve	<u>1.5</u>	1.1	<u>.9</u>	<u>1.5</u>	1.5
Subtotal	36.3	42.8	31.4	36.3	33.0
Total	220.2	235.9	187.0	195.7	191.7

Training workload accounts for all students trained by the Service training commands. This includes DoD military students, civilians, foreign students and students from other U.S. agencies.

TABLE 9. Training Workload Trends (Thousands)

	Actuals			Estin	nates
	FY 89	FY 90	FY 91	FY 92	FY 93
Army	100	107	79	90	86
Navy	71	65	57	53	51
Marine Corps	17	22	17	19	19
Air Force	34	35	28	33	33
Defense Health Program *	_	_	_5	_5	_5
Total	222	229	186	200	194

The next two tables demonstrate the Department's emphasis on improving training efficiencies. Although total training workload is the same for FY 1991 and FY 1993, there has been a 14 percent reduction in manpower and a 7 percent reduction in funding over this period.

TABLE 10. Manpower Trends in Support of Training (Combined Military and Civilian End Strengths, Thousands)

		Actuals		Estir	nates
	<u>FY 89</u>	FY 90	FY 91	FY 92	FY 93
Army	79	75	74	66	62
Navy	46	45	42	41	39
Marine Corps	15	16	14	13	12
Air Force	<u>39</u>	<u>38</u>	<u>36</u>	<u>31</u>	<u>30</u>
Total	179	174	166	151	143

^{*} Numbers under Defense for Fy 1992 and FY 1993 represent costs for Defense Health Program workload activities that in the past have been funded in the Services.

TABLE 11. Individual Training Funding Trends (All Appropriations)
(\$ Billions)

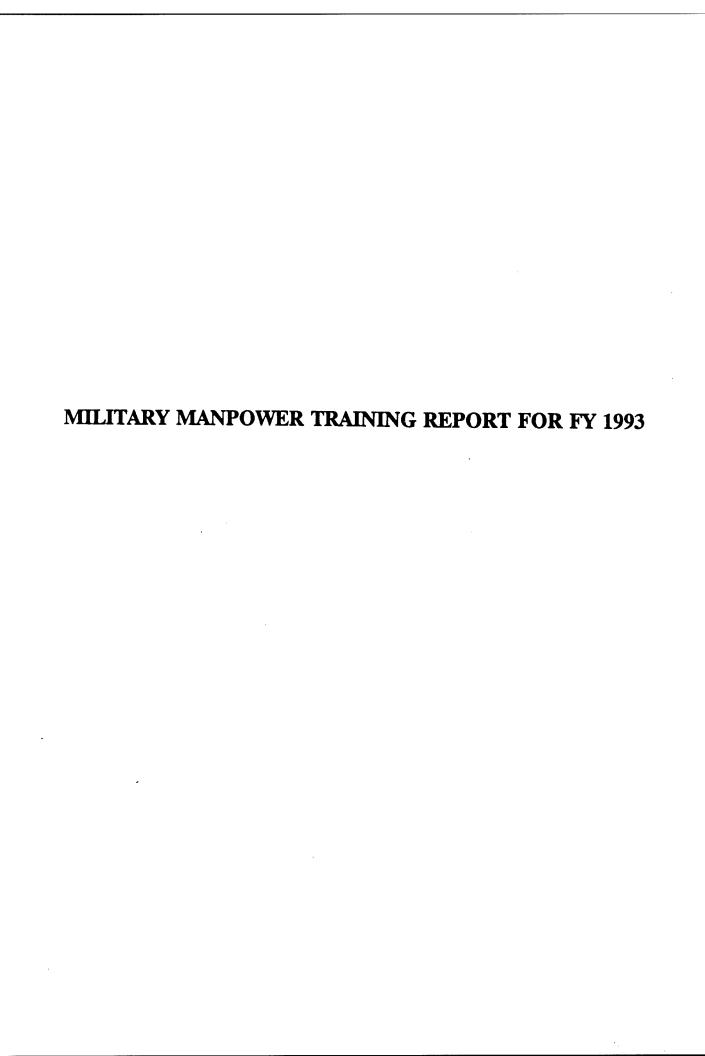
		Actuals		Estir	nates
	FY 89	FY 90	FY 91	FY 92	FY 93
Army	6.0	5.9	6.0	5.7	5.4
Navy	5.4	5.1	5.2	5.0	4.8
Marine Corps	1.2	1.3	1.2	1.3	1.3
Air Force	3.3	3.4	3.4	3.1	3.1
Defense Health Program *	_	-		<u>0.1</u>	_0.1
Total	15.9	15.7	15.8	15.2	14.7

The Necessity for Individual Training

The primary objective of individual training is to provide the operational forces with personnel adequately trained to assume jobs in both Active and Reserve military units. Without effective training and education programs, the operational forces would be manned by personnel who are less than fully qualified for their jobs.

One of the cornerstones of readiness is the conduct of effective individual training at Service Training institutions. Unlike in past wars, we may not be able to count on extended periods of mobilization and training in response to future conflicts. Maintaining excellence in our individual training at Service training programs during peacetime results in a military force ready to respond in a national emergency.

^{*} Numbers under Defense for FY 1992 and FY 1993 represent costs for Defense Health Program training activities that in the past have been funded in the Services.



INTRODUCTION

Training Requirements and Manpower Requirements

Requirements for training and education of military personnel are derived ultimately from national security objectives. The Military Manpower Training Report (MMTR), the Report of the Secretary of Defense to the Congress on the FY 1993 Budget, and the Defense Manpower Requirements Report, describe the progression from national security objectives to training load requirements. The Report of the Secretary of Defense explains the relationship between the threat and the forces designed to cope with the threat. The Defense Manpower Requirements Report describes the requirement for trained manpower to man the forces. The Military Manpower Training Report takes as a starting point the requirement for trained military manpower described in the Defense Manpower Requirements Report. These requirements relate to the demand placed on the military training establishment to supply trained manpower. This demand leads to the DoD request for military student training load authorizations for each component of the military services. The Defense Manpower Requirements Report and the Military Manpower Training Report are mutually supportive; however, the data in the two reports are not interchangeable or directly comparable. The principal reason for this difference is that the main focus of the Defense Manpower Requirements Report is upon requested strength on the last day of fiscal years (that is, end strength), whereas the main focus of the Military Manpower Training Report is upon requested student loads, a concept more comparable to average strength, or man-years, than to end strength.

Definition of "Individual Training and Education"

This report addresses the "individual training and education" activities of the Department of Defense; that is the training of individual military members in formal courses conducted by organizations whose primary mission is training. This training is different from training activities conducted by operational units incidental to their primary combat, combat support, or combat service support missions. Training conducted within operational units (including the training of crews and teams) is not included in the training loads discussed in this report. In certain categories of training, on-the-job training (OJT) in units substitutes to some extent for all or part of formal course training requirements. OJT is also not included in the training loads discussed in this report.

The purpose of individual training is to give individual service members the skills and knowledge that will qualify them to perform effectively as members of operational military organizations. "Individual training" includes formal military and technical training and professional education conducted under centralized control, generally under the supervision of a Service training command or similar organization. The trainees and students

undergoing the training and education addressed in the MMTR include Active Force members and Reserve Component members:

- Active Force trainees and students include officers, enlisted personnel, and service academy cadets and midshipmen.
- Reserve Component trainees and students include officers and enlisted members on active duty for training in formal school courses.

Some civilian students attend training in programs such as the Reserve Officers' Training Corps (ROTC) prior to their entry into a Service. These programs are also discussed in the report. However, training load authorizations are requested only for training and education of personnel while they are in active military status.

In general, the training discussed in this report is conducted under Major Defense Program VIII, "Training, Medical and Other General Personnel Activities," as presented in the Defense budget. Exceptions to these general rules are pointed out, where appropriate, in the body of the report.

Personnel undergoing individual training and education are classified for manpower accounting purposes as trainees, students, or cadets. The exceptions are: (1) personnel undergoing training while on temporary duty or temporary additional duty away from their unit of assignment, or (2) personnel being trained while en route to new stations as transients. The term "trainees" is generally used for all enlisted personnel in Recruit Training and Initial Skill Training. "Cadets" (or "midshipmen" in the case of the Naval Academy) are members being educated at one of the service academies. All others receiving individual training and education are identified as "students." The distinction is not important for the purposes of this report, and the term "student" will be used where appropriate to describe members of all three classifications as well as temporary duty and transient personnel being trained.

FY 1993 Military Manpower Training Report and the FY 1993 Budget

It is important to emphasize that this MMTR, while consistent with the Department of Defense Budget for FY 1993, differs in structure from the budget justification. Budget justifications are focused on explaining how, by whom, and why money is to be spent. Budgets for training and their justifications, therefore, are prepared by the Service which conducts the training programs. As a result, each Service must justify and obtain funds to train personnel from other Services in addition to its own personnel.

By contrast, the MMTR details and justifies the authorization request for training loads of the components of the parent Service whose members are undergoing the training. For example, Navy personnel being trained by the Air Force are treated in the MMTR as part of the Navy military student training load since they are being trained to fill Navy requirements. However, in O&M budget justification documents, Navy students attending Air Force schools are included in the Air Force training workload tables that justify Air Force training resources. This report contains summary tables of the manpower and funding required by the Services to conduct training based on estimated workloads.

Changes to the FY 1993 Military Manpower Training Report

The FY 1993 report includes changes which improve the funding estimates and reconciles the MMTR to the Operation and Maintenance Budget Overview. The funding of TDY and PCS for individual training as previously reported in the MMTR was determined to be already included in the funding for the training categories. Therefore, this report does not separately report these costs. Additionally, an improved methodology was utilized for calculating the funding estimates for Reserve Component student pay and allowances.

The MMTR funding tables include individual training costs for all appropriations. Due to congressional interest in the Operations and Maintenance (0&M) Appropriation for Program 8 for individual training and education, an appendix has been added to the MMTR. Appendix E provides a comparison between 0&M funding contained in the MMTR and tables submitted as a part of the President's Budget 0&M Overview.

Definitions of Major Training Categories

The portion of this report which discusses training loads in detail is organized into five chapters (Chapters III through VII), each of which addresses one of the major categories of training. These major categories are briefly defined below. Each chapter will more fully describe the training category and its sub-categories, the requested training loads, and the training methodology.

Recruit Training includes the introductory physical conditioning, basic military training, and indoctrination given to all new enlisted entrants in each of the Services. One-Station Unit Training (OSUT) is an Army training program which meets the training objectives of both Recruit and Specialized Skill Training in certain skills through a single course conducted by a single training unit. Since it includes elements of two categories of training, it is treated separately in this report.

Officer Acquisition Training, sometimes called pre-commissioning training, includes all types of education and training leading to a commission in one of the Services. Examples are programs of the service academies and officer candidate/training schools. Students not in active military status, such as Reserve Officers' Training Corps students, are excluded from requested loads in this report.

Specialized Skill Training provides officer and enlisted personnel with initial job qualification skills or new or higher levels of skill in their current military specialty or functional area. This category includes Army Advanced Individual Training and Navy Apprenticeship Training. Certain flight-related training, such as training of air traffic controllers, aircraft mechanics, and Air Force survival training, is reported under Specialized Skill Training. Officer acquisition programs are not included in Specialized Skill Training. The Marine Corps Combat Training (MCT) phase of the Marine Battle Skills Training has been included in this category since FY 1989.

Flight Training provides the individual flying skills needed by pilots, navigators, and naval flight officers. The undergraduate flight training programs culminate in an officer or an Army warrant officer receiving "wings" and being categorized as a "designated" or "rated" officer. The undergraduate programs do not include the formal advanced flight training programs. Training conducted by Service advanced flight training organizations is beyond the scope of this report.

Professional Development Education includes educational courses conducted at the higher-level Service schools or at civilian institutions to broaden the outlook and knowledge of senior military personnel or to impart knowledge in advanced academic disciplines to meet Service requirements. Training of this type is required to prepare individuals for progressively more demanding assignments, particularly for higher command and staff positions. Programs include undergraduate and graduate education as well as courses not leading to a degree.

Training for senior non-commissioned officers, which has a broad professional content, is included in Professional Development Education rather than in Specialized Skill Training. Training of junior and middle-grade officers and non-commissioned officers is generally included in Specialized Skill Training where the training includes specific branch or job-specific training rather than broad, common skills. For example, Navy leadership training, which is given to all grades of petty officers, is included in Specialized Skill Training. Non-commissioned officer training for more junior personnel conducted by the other Services is also included in Specialized Skill Training.

Determining Training Requirements and Training Load

The amount and type of training to be conducted in the Department of Defense is the product of a series of calculations that is described in Appendix A to this report.

In brief, the process begins with the determination of the requirement for military personnel with specific skills to fill positions in the approved or projected force. The requirement for trained manpower must then be measured against the available inventory of trained personnel projected at various points in the future.

This comparison, made for each military skill and skill level, establishes the need for training personnel to fill current and projected skill shortages. The requirement for the training of personnel to maintain the skill inventory becomes part of the workload of the Service training establishments. It is measured in terms of the average military training student load, or "training load." The training load for a given period is a measure of the amount of training to be accomplished. It is also a basis for establishing the requirement for resources (manpower, funds, material, and facilities) needed to support the training to be conducted by a Service.

Conceptually, the training load for a given period is the average student strength for the period, roughly equal to man-years. The total training load is the sum of the loads for all the individual courses. Training loads for individual courses are determined by the following factors:

- 1. The length of the training course.
- 2. The desired number of graduates, or output, of the course.
- 3. The number of entrants, or inputs, into the course required to obtain the desired output. This, in turn, depends on the pattern of attrition, or failures of entrants to graduate, for the course.

The training load is computed by the following formula:

Entrants + Graduates X Course Length
$$=$$
 Load $=$ Load

1/ Training time is expressed as a fraction of a year

This is the basic method for computing the training loads discussed in this report. However, if attrition does not occur at a uniform rate (as is frequently the case) and the rate and phasing can be specified, more complex formulas and computer simulations are used to estimate training loads.

Accuracy in Projecting Training Loads

The law requires that training load authorizations be requested well in advance of the period when the training is actually conducted. This statutory requirement implies the capability to predict future training loads with precision. In actuality, while loads for some long lead-time programs, such as the service academies, can be predicted with considerable accuracy, there are many uncertainties in projecting training loads. Some of the causes of uncertainty are:

- 1. Unanticipated changes in end strength levels and force structure, requiring adjustment of the skill inventory and the mix of courses in the training load.
- 2. Unpredictability of individual decisions to enlist, re-enlist, or retire. These factors may lead to unanticipated changes in the skill inventory, requiring changes in the composition or size of training loads, or to shifts of portions of the training load from one fiscal period to the following period.
- 3. Changes in attrition rates and patterns, causing unprogrammed fluctuations in training rates and loads.

By forecasting training needs as far as possible into the future and continuously reviewing and adjusting training inputs and loads, the Services adapt the training system to changing conditions. However, it should be understood that extended projections are subject to error; adjustments are inevitable and, in fact, necessary for good management.

Training Load Request by Component and Category

The tables on the following two pages display by category the requested training loads for FY 1992 and FY 1993. The loads for each period are shown by component and by each of the major categories of training.

TABLE I-1. Military Training Student Loads, Fiscal Year 1992, By Component and Major Training Category

	Recruit Training	One-Station Unit Training	Officer Acquisition Training	Specialized Skill Training	Flight Training	Professional Development Education	Total
Active Forces Army Navy Marine Corps Air Force	8,691 10,025 7,168 4,893	5,166	5,092 5,962 404 6,218	36,197 33,545 8,686 12,144	883 1,546 580 1,105	3,267 2,305 2,137 3,347	59,296 53,383 18,975 27,707
Subtotal	30,777	5,166	17,676	90,572	4,114	11,056	159,361
Reserve Components Army Reserve Army National Guard Naval Reserve Marine Corps Reserve Air Force Reserve	3,137 3,218 478 1,210 388	1,419 2,681 -	1,478 82 15 168 16	7,514 6,864 1,318 1,558 975 2,252	78 246 69	63 63 63	13,693 13,171 1,824 3,108 1,514
Subtotal	8,883	4,100	1,759	20,481	630	461	36,314
Total	39,660	9,266	19,435	111,053	4,744	11,517	195,675

TABLE I-2. Military Training Student Loads, Fiscal Year 1993, By Component and Major Training Category

Total	60,269 51,405 19,016 27,971	158,661	12,583 10,529 1,892 3,418 1,529 3,048	32,999	191,660
Professional Development Education	3,527 2,327 2,115 3,371	11,340	208 11 8 8 8 10 8 8 8	512	11,852
Flight Training	876 1,551 573 945	3,945	65 265 85 235	<u>650</u>	4,595
Specialized Skill Training	36,327 31,076 8,697 12,226	88,326	6,805 5,643 1,217 1,634 1,008	18,612	106,938
Officer Acquisition Training	4,913 5,950 394 6,511	17,768	1,467 121 15 159 16	1,778	19,546
One-Station Unit Training	5,598	5,598	1,373 2,322 -	3,695	9,293
Recruit Training	9,028 10,501 7,237 4,918	31,684	2,797 2,090 649 1,417 354	7,752	39,436
	Active Forces Army Navy Marine Corps Air Force	Subtotal	Reserve Components Army Reserve Army National Guard Naval Reserve Marine Corps Reserve Air Force Reserve	Subtotal	Total

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TRAINING PATTERNS

General Description

The development of Service members through formal training, education, and practical experience generally follows a common pattern. New Service members (or, in the case of some Officer Acquisition Training, prospective Service members) first receive training designed to develop the basic attributes of the members of their Service. In most cases, a graduate of the initial training is then taught the skills required for a military job at the lowest skill level. Service members who do not remain beyond their initial enlistments or obligated terms of service do not, in most cases, receive additional formal training. Those who remain, the career members, will further develop their military knowledge and technical skills through experience in military jobs augmented with training or education needed to prepare them for more responsible positions. During their terms of service, military personnel are also encouraged, as their military assignments may permit, to improve themselves through off-duty and voluntary education programs. This combination of job experience, training and education is essential to the development of a military force that is capable of carrying out the national security mission.

Enlisted personnel usually work in relatively specialized skill fields, whereas the duties of officers, particularly those in the career force, call for broader expertise. For these reasons, the training and education patterns of officers and enlisted personnel differ and will be discussed separately in the following sections of this chapter.

In addition to training members of the active forces, the Service training establishments also train members of the Reserve Components. Reserve Component training, as part of individual training and education, involves Reservists and Guardsmen who are on active duty for formal school training. It does not include training of Reserve Component members provided under the following circumstances:

- Training received by individuals while on extended active duty serving with an active component (this training is included in active force aggregates);
- On-the-job training (OJT) or other individual training conducted by Reserve units;
- Training received while on annual active duty for training, except if provided through courses conducted by the active training establishment;
- Training received while the individual is not in an active military status. (As a minor exception, some Reserve and Guard technicians attend military schools in Civil Service status.)

Training of members of the Reserve Components will comprise 15 percent of all individual training and education in FY 1992 and FY 1993.

Officer Training Patterns

Each Service has developed career patterns to prepare its officers to assume progressively higher command and staff responsibilities. These career patterns are composed of operational assignments during which the officers learn their profession through experience and periodic individual training and education. This provides them with the knowledge and skills needed for progressively more demanding follow-on assignments.

Officer training and education can be divided into three types. First, each Service maintains a progressive system of professional military education. This education is related more to the increasing responsibilities associated with career progression and promotion than to the individual's current assignment or specialty. The primary topics are the study of officership and the command and staff knowledge required of all professional military officers. The second type of education and training includes the many specific skill-producing courses that enable the officer to perform immediately upon assignment to a specialized or functional area. These courses vary in length from a few days to several months. They present, for the most part, strictly job-oriented training and are often orientation or refresher courses. Third, the Services provide selected officers with advanced academic education, either inhouse or at civilian institutions, to meet specific requirements for officers educated in technical, scientific, engineering, and managerial fields. Officers also participate in a variety of other educational programs, many on a part-time basis, usually with the student sharing in the cost.

Training and education for career officers involves one or more of the types of training and education described above and follows the general patterns outlined in the following paragraphs. The patterns vary among the Services to some extent, and not all officers will participate in all of the schooling described. The number of officers participating in schooling becomes progressively smaller, and participation more selective and demanding, as officers move through their careers.

Generally, non-career officers (those who are expected to serve only an initial tour of active duty) receive training only at the entry level. In some cases, lengthy skill-oriented training (such as pilot training) results in a commensurately longer active duty obligation.

Entry Level Training. Initial officer training is Service-oriented and intended to prepare officers for duties at the lowest operational level, i.e., company, squadron, or ship. Newly commissioned Army officers will attend a basic course conducted by the particular branch of the Army, such as infantry, armor or artillery. Navy ensigns are usually assigned to school training based on their warfare specialty. All newly commissioned Marine officers attend the Basic School. A newly commissioned officer in the Air Force may go to Flight Training or training in a technical specialty.

<u>Career Training</u>. After some operational experience, the career officer requires further professional military education to prepare for service at the next level. For example, as a unit commander or a headquarters staff officer. In the Army this entails a return to branch school for more advanced training. Navy officers at this stage in their careers may attend a school in a specialty appropriate to their future assignments. A Marine Corps officer would normally attend the Amphibious Warfare School. An Air Force officer could be selected for the Squadron Officer School.

To satisfy Service requirements and as a further step in professional development, some officers are selected for participation in an advanced academic educational program at a civilian institution or at one of the two Service technical institutes, the Naval Postgraduate School and the Air Force Institute of Technology.

Intermediate Service Schools. As officers progress (between six and sixteen years of service, depending on Service criteria) they are ready for the next level of professional military education. These schools prepare officers for command and staff responsibilities in preparation for assuming higher responsibilities. Officers are competitively selected to attend each Service's program. The Armed Forces Staff College, a joint school, is also conducted at this level.

Senior Service Colleges. Little technical training is provided after the intermediate years. The final level of professional military education is that of the Senior Service Schools (the war colleges) for which attendance is highly selective. The Army, Navy, and Air Force each has a war college. In addition, there is the National Defense University, consisting of the National War College, the Industrial College of the Armed Forces, and the Capstone course for general officers. Officers graduating from the Senior Service Schools have the academic foundation required for command and staff positions at the highest level. The different curricula of these schools reflect the different missions of the Services. In some instances Reserve officers are able to attend Senior Service Schools in residence. The schools also offer a non-resident course which consists of correspondence studies and resident phases.

Enlisted Training Patterns

Recruit Training introduces new enlistees to military life. Following this indoctrination, they will follow one of three possible avenues dictated by their respective component's requirements:

- (1) Initial Skill Training which prepares the enlistee for an initial duty assignment;
- (2) Direct assignment to first duty unit based on skill already acquired in civilian life; or
- (3) Direct assignment to first duty unit for on-the-job training (OJT).

The Army One-Station Unit Training (OSUT) program is a variation of the first of these three avenues, since it combines Recruit and Initial Skill Training into a single course, followed by assignment to an operational unit. About 31 percent of the FY 1992 and 34 percent of the FY 1993 Active Army entrants to initial skill enlisted training will be trained under OSUT. For the Reserve Components, about 34 percent of the FY 1992 and FY 1993 Army entrants to initial skill enlisted training will receive OSUT.

The expected distribution of Active Recruit Training graduates for FY 1993 is shown in the following table.

TABLE II-1. Disposition of Active Recruit Training Graduates for FY 1993

	Army	Navy	Marine Corps	Air <u>Force</u>
To Initial Skill Training	99%	66% <u>a</u> /	92%	96%
To Duty Assignment (Civilian-Acquired Skill)	1%	0%	6%	0%
To Duty Assignment (On-the-Job Training)	0%	34%	2%	4%
	100%	100%	100%	100%

a/ 33% of Navy Recruit Training graduates attend short "Apprenticeship Training" courses (carried under Initial Skill Training in this report) as a preliminary to further training on the job.

As the table indicates, most enlisted personnel receive formal Initial Skill Training to provide them with a basic military skill. This combination of Recruit Training and Initial Skill Training (or Army One-Station Unit Training) turns civilians into service members qualified to fill positions in Active or Reserve units.

During their initial enlistments, personnel normally receive no further formal skill training but gain experience through on-the-job training in the work environment. The major exception is Navy training, conducted by fleet training centers in such shipboard duties as firefighting.

After reenlistment, individuals may be selected for attendance at a journeyman-level course in their specific occupational area. This training emphasizes the appropriate military applications for the skills being taught. Most enlisted personnel are given the opportunity

to attend Non-Commissioned Officer (NCO) professional development training programs which prepare them for increased supervisory and leadership responsibilities.

Normally, few enlisted personnel attend regularly programmed specialized courses after mid-career. There are instances, of course, where new equipment or systems are introduced into a Service, and senior level enlisted personnel are formally trained in operation and maintenance techniques. Selected Active and Reserve senior enlisted personnel attend schools, such as the Army's Sergeants Major Academy and Air Force Senior NCO Academy, which are on the NCO level, similar in purpose to the Intermediate and Senior Service Schools in the officer education system.

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RECRUIT TRAINING AND ARMY ONE-STATION UNIT TRAINING

General Description

Recruit Training is the basic indoctrination training given to enlisted personnel upon their initial entry into military service. Recruit Training provides an orderly transition from civilian to military life, instruction in the required basic skills, and motivation to become dedicated and productive. Training in each of the Services emphasizes discipline, military rules, social conduct, physical conditioning and development of self-confidence. Beyond these common objectives, Recruit Training in each Service is designed to meet the particular training requirements of that Service which reflect the Service's mission. Graduates of Recruit Training have the basic knowledge and skills required to qualify them, after formal or on-the-job training in a particular skill, for service in an operational unit of the parent Service.

Army One-Station Unit Training (OSUT) is unique in that it combines Recruit Training and Initial Skill Training in certain skills into a single course conducted by a single training unit at a single training installation. OSUT therefore includes elements of two major training categories; consequently, it is treated separately at the end of this chapter. OSUT training loads are not included within the Recruit Training loads displayed in this chapter.

Recruit Training Loads

The training loads for FY 1987 through FY 1993 for each component of each Military Service are shown in Table III-1 on the following page. Note that the trend has been consistently down through FY 1991. The reductions in force structure caused the downward trend in recruit training. The slight increase in FY 1992 and FY 1993 is needed to sustain the new force structure levels and support enlisted career force planning.

TABLE III-1. Recruit Training Load Trends

Service Component	FY 87	FY 88	FY 89	<u>FY 90</u>	<u>FY 91</u>	<u>FY 92</u>	FY 93
Army							
Active	11,481	10,091	11,102	11,559	7,049	8,691	9,028
Reserve	3,487	3,528	3,405	4,004	2,590	3,137	2,797
Natl Guard	3,972	3,559	3,516	4,058	2,531	3,218	2,090
<u>Navy</u>							
Active	14,564	14,211	12,045	10,085	10,419	10,025	10,501
Reserve	1,350	1,017	1,001	1,029	854	478	649
Marine Corps							
Active	7,420	7,689	7,572	7,605	7,092	7,168	7,237
Reserve	1,879	1,818	1,774	1,775	1,639	1,210	1,417
Air Force							
Active	6,287	4,684	4,713	4,308	3,856	4,893	4,918
Reserve	401	341	313	283	203	388	354
Natl Guard	725	470	472	469	360	452	445
<u>DoD</u>							
Active	39,752	36,675	35,432	33,557	28,416	30,777	31,684
Res/Gd Tot	<u>11,814</u>	<u>10,733</u>	10,481	11,618	8,177	8,883	<u>7,752</u>
Total	51,566	47,408	45,913	45,175	36,593	39,660	39,436

NOTE:

In this table and in all subsequent tables in this report, training loads for the years prior to and including FY 1991 data are <u>actual</u>, FY 1992 and subsequent year data are <u>estimated</u>.

Table III-1 above does not include Army One-Station Unit Training loads.

Recruit Training

The following table displays the average Recruit Training loads for each year from FY 1990 to FY 1993 and, for FY 1992 and FY 1993, the number of entrants (input) and number of graduates (output). Data are shown separately for each component of each Service.

TABLE III-2. Recruit Training Input, Output and Load

<u>Service</u>	FY 90	<u>FY 91</u>		FY 92			FY 93	
Component	Load	Load	<u>Input</u>	Output	Load	Input	Output	Load
Army								
Active	11,559	7,049	55,840	53,299	8,691	57,969	55,389	9,028
Reserve	4,004	2,590	20,046	19,156	3,137	17,886	17,077	2,797
Natl Guard	4,058	2,531	20,578	19,646	3,218	13,359	12,752	2,090
Navy								
Active	10,085	10,419	62,637	57,000	10,025	66,638	60,641	10,501
Reserve	1,029	854	2,987	2,718	478	4,119	3,748	649
Marine Corps								
Active	7,605	7,092	32,430	26,748	7,168	31,866	27,992	7,237
Reserve	1,775	1,639	5,289	4,684	1,210	6,200	5,416	1,417
TCGCT VC	1,775	1,057	3,209	4,004	1,210	0,200	3,410	1,417
Air Force								
Active	4,308	3,856	39,000	36,270	4,893	39,000	36,600	4,918
Reserve	283	203	3,407	2,566	388	2,844	2,604	354
Natl Guard	469	360	3,600	3,360	452	3,600	3,245	445
DoD								
Active	33,557	28,416	189,907	173,317	30,777	195,473	180,622	31,684
Res/Gd	<u>11,618</u>	8,177	<u>55,907</u>	52,130	<u>8,883</u>	48,008	44,842	7,752
Total	45,175	36,593	245,814	225,447	39,660	243,481	225,464	39,436

Each Service conducts training for women recruits that is similar in concept to Recruit Training for males. The training syllabi are essentially the same for males and females. The major difference between the two courses is that women recruits generally receive less

training in combat-oriented skills. The de-emphasis on combat skills in the Marine Corps causes the length of training for women to be somewhat shorter.

Rationale for Recruit Training

The underlying philosophy of Recruit Training is that the demands of military service are fundamentally different from those of civilian life. Military service requires a high level of discipline and physical fitness, a homogeneity of outlook, and an ability to live and work as part of a highly structured organization. There are few parallels in civilian society to the demands of military service. Each recruit, therefore, must be transformed into a member of the military team in order to function effectively in the military environment. The attitudes, habits, and basic skills formed in Recruit Training are the foundation of a cohesive military organization. Later training provides the skills and knowledge needed for specific jobs; Recruit Training shapes civilian entrants into dedicated members of their Military Services with the potential for further development.

The major determinants of Recruit Training loads are the total number of people entering service who must receive Recruit Training (input), the length of the training course, and projected patterns of attrition. Course length and attrition are discussed later in this chapter. The following two sections discuss inputs: first, inputs of active duty personnel, and second, inputs of members of the Reserve Components on active duty for initial training.

Active Duty Input

The annual recruiting objective for active duty enlistees without prior military service is a function of the following factors:

- 1. Current enlisted trained strengths.
- 2. Number of enlisted personnel currently in training.
- 3. Projected enlisted losses through separations or other reasons (e.g., desertion, death, acceptance of a commission, retirement, etc.).
- 4. Projected prior service enlistments, i.e., the return from civilian life of former Service members.
- 5. The projected requirement for trained enlisted personnel.

"Trained strength" is the number of personnel required to fill "structure" spaces (i.e., positions in military organizations that require specific grades and skills) and individual "pipeline" spaces, such as transients en route between assignments. The Defense Manpower Requirements Report contains a full discussion of how military manpower requirements are determined. The projected trained strength requirement is compared with the projected trained strength inventory to forecast future skill and strength imbalances. Future shortages that are not expected to be satisfied, either by prior service enlistees or Service members currently in skill training courses, determine the training output needed to man the force

with trained personnel. To determine the necessary input to achieve this output, allowance must be made for the number of students entering a course of instruction who fail to complete it. The total input requirement is increased to compensate for expected attrition losses.

The training organizations attempt to manage inputs to achieve the most efficient use of training staff personnel and training facilities is a continuing goal. However, the phasing of inputs may at times be varied in order to take advantage of the best recruiting periods for maintaining quality and quantity.

Historically, the highest accessions occur in June through September and January, a reflection of the civilian academic calendar. Enlistments increase (1) shortly after high school graduation, (2) when peers return to school in the fall, and (3) after the results of the first term of college academic work are announced.

The Services must be able to accept most prospective enlistees when they are ready to enter service. Requiring enlistees to enter military service in phase with requirements and on an even flow-basis would result in the loss of many potential enlistees to other sources of employment. Accepting enlistees as they become available, however, requires a training structure capable of accommodating surges of enlistments.

Reserve Component Input

Persons enlisting in the National Guard and Reserve forces without active duty experience require the same Recruit Training as active duty enlistees, and for the same reasons. Recruit Training loads for the Reserve Components are based on the same factors as active force loads. Guard and Reserve trainees, while in Recruit Training, are mingled with active duty trainees in units so that their training is identical.

Reserve Component recruits form a significant part of the workload of the active Recruit Training establishment. Recruit Training for the Reserve and Guard will account for 22 percent of all DoD Recruit Training in FY 1992 and 20 percent in FY 1993. Reserve Component training accounts for 44 percent of all Army One-Station Unit Training programmed in the Department of Defense for FY 1992 and 40 percent in FY 1993.

Planning considerations for Reserve Component personnel are essentially similar to those for the active force. Detailed phasing of this training is complicated, however, by the additional consideration of civilian employment or school commitments for these personnel. For this reason, a pool of personnel who have enlisted but who have not yet attended initial training is normal. This backlog is kept within a reasonable size.

Course Length and Course Content

Enlisted training loads depend not only upon the numbers of entrants but also on the extent of skills required of entering enlisted personnel. Enlisted personnel attain those skills in Recruit Training and in Specialized Skill Training. Recruit Training course lengths are determined in part by how much of the required training is to be provided during the Recruit Training phase and how much is to be deferred to later training. Because of differences in their missions, the Services take somewhat different approaches in establishing the content and length of their Recruit Training courses.

Recruit Training in each of the Services covers four areas: (1) some processing and testing; (2) introduction into Service life; (3) instruction in military courtesy, discipline, and hygiene; and (4) fundamental military-related training involving physical fitness, military drill, and self-defense. In addition, each Service provides training in military skills that should be possessed by most members of that Service. The degree to which these Service-wide skills exist differs among the Services. This factor accounts for most of the differences in course content and, therefore, course length.

Length of the standard Recruit Training course in each Service is shown in the following table.

TABLE III-3. Recruit Training Course Length (Weeks)

	Army	Navy	Marine Corps	Air Force
FY 1992	8	8	11	6
FY 1993	8	8	11	6

Note: Chart reflects average weeks of training. Actual course time may vary by a few days depending upon Service requirements and training location.

Army and Marine Corps Recruit Training differ from the Air Force and Navy programs because all recruits are given intensive physical conditioning and instruction in basic ground combat skills, including the use of individual weapons. The Army and Marine Corps train all enlisted personnel to achieve a basic level of qualification in ground combat skills during their Recruit Training program.

The Air Force is able to accomplish Recruit Training in six weeks because the curricula concentrates on military indoctrination subjects. Relatively little training in Service-wide

occupational skills is provided, since there are few common occupational skills needed by all Air Force enlisted personnel. In addition to indoctrinating recruits to military life, the Navy course includes phases designed to prepare them for conditions in a fleet environment and common duties found on board ships.

The average length of time spent in recruit status in any of the Services may be longer than the standard course lengths discussed above. Some recruits fall behind their peers because of medical problems. Others require remedial training. A recruit may be sent to a special training unit or recycled to a following class to repeat a portion of the course.

Enlisted members of the Reserve Components without prior service receive the same basic qualification training as active service members. Each non-prior service enlistee in the Reserve Components undergoes, as a minimum, the equivalent of twelve weeks of active duty training. This is accomplished by sending the enlistee through Recruit Training and, in most cases, on to Initial Skill Training. Many Army Guardsmen and Reservists are provided initial military training in certain occupational skills through One-Station Unit Training.

A split training option is available to the Reserve Components. This program normally separates Recruit Training from Specialized Skill Training. This option is limited to enlisted entrants who cannot attend all their required training in one block due to educational or occupational commitments. The Reserve member attends unit drill after completing Recruit Training and normally returns to active duty within one year to complete Initial Skill Training.

Attrition in Recruit Training

A final factor in the computation of loads is the projection of the rate and timing of attrition. Recruits may fail to complete training for medical reasons, inability to absorb the instruction, lack of motivation, disciplinary problems, or a variety of administrative causes, such as discharge for fraudulent enlistment or family hardship.

The table below shows projected attrition losses.

TABLE III-4. Recruit Training Attrition Projections
(Active and Reserve Combined)

•	Army	Navy	Marine Corps	Air Force
FY 1992	4.5%	9.0%	9.4%	8.0%
FY 1993	4.4%	9.0%	9.4%	8.0%

The timing of attrition varies from case to case. In the case of slow learners or individuals who have difficulty in adjusting to military life, trainees usually are reentered or given special instruction. Those who do not respond adequately may not become attrition losses until late in the course.

Army One-Station Unit Training

The Army's One-Station Unit Training (OSUT) program combines Recruit Training and Initial Skill Training for certain skills into a single continuous course. Consequently, this report treats OSUT separately rather than arbitrarily breaking it into two segments.

OSUT loads for FY 1987 through FY 1993 are shown in the following tables.

TABLE III-5. OSUT Training Load

Service Component	FY 87	FY 88	FY 89	<u>FY 90</u>	FY 91	FY 92	FY 93
Army							
Active	10,223	8,099	9,018	8,337	6,401	5,166	5,598
Reserve	1,960	1,225	1,179	1,835	1,184	1,419	1,373
Natl Guard	4,505	4,154	3,211	3,846	2,873	<u>2,681</u>	<u>2,322</u>
Total	16,688	13,478	13,408	14,018	10,458	9,266	9,293

TABLE III-6. OSUT Training Input, Output, and Load

<u>Service</u>		FY 1992			FY 1993	3
Component	Input	Output	Load	<u>Input</u>	Output	Load
Army						
Active	20,039	18,501	5,166	21,413	19,655	5,598
Reserve	6,179	5,743	1,419	5,712	5,263	1,373
Natl Guard	12,137	<u>11,325</u>	<u>2,681</u>	<u>10,980</u>	10,285	<u>2,322</u>
Total	38,355	35,569	9,266	38,105	35,203	9,293

Approximately one third of Army active and Reserve Component entrants are trained under OSUT. Because of the programmed reduction in Army force structure, OSUT training loads will decrease approximately 11 percent from FY 1990 to FY 1992 and 14 percent from FY 1990 to FY 1993.

In FY 1992 and FY 1993 there will be 49 different OSUT courses for six major skill areas described in Table III-7. In general, OSUT requires less training time than the separate Recruit Training and Initial Skill Training courses that it replaces. Table III-7 shows training time for OSUT occupational skill areas.

TABLE III-7. OSUT Training Time In Weeks

Skill Area	Training Time (Weeks)
Infantry a/ Artillery	12.9
Armor	13.6 13.7
Engineer Military Police	13.0 17.0
Chemical	20.0

a/ Mechanized infantry soldiers require an additional 3 weeks of training for tracked vehicle qualification.

The time required to complete Recruit Training and the Initial Skill Training in separate courses for these skills would be about 4 weeks longer, including the time required to move the trainee from one training organization to another. The shorter OSUT course lengths provide a significant savings in trainee man-years and, consequently, in trainee pay, allowances, and support costs.

OFFICER ACQUISITION TRAINING

General Description

Officer Acquisition Training consists of training and education programs leading to a commission in one of the Military Services. These programs fulfill the need both for junior officer entrants into the career force and for non-career junior officers in the force structure. Officer Acquisition Training programs produce officers for both the active forces and the Reserve Components.

ROTC and Health Professions Acquisition Programs

The total training loads in Table IV-3 on the following page do not include two types of Officer Acquisition Training: the Army, Navy, and Air Force Reserve Officers' Training Corps (ROTC) programs and the Armed Forces Health Professions Scholarship program. ROTC and Health Professions Scholarship students are not in active military status, whereas students who make up the training loads discussed in this report are either members of the active forces or members of the Reserve Components being trained on active duty by the active establishments. Although these two programs are not included in the requested training loads, they are discussed in this chapter to provide a complete account of Officer Acquisition Training. The following tables show the number of participants in these programs in the period FY 1990 through FY 1993.

TABLE IV-1. Average Enrollees, Senior ROTC

<u>Service</u>	<u>FY 1990</u>	FY 1991	FY 1992	FY 1993
Army	59,099	47,474	42,148	41,345
Navy	9,218	8,266	8,416	8,169
Air Force	<u>18,709</u>	14,012	12,042	11,366
Total	87,026	69,752	62,606	60,880

TABLE IV-2. Health Professions Scholarships

Service	FY 1990	FY 1991	FY 1992	FY 1993
Army	1,440	1,365	•	
Navy	1,243	1,379	-	-
Air Force	1,315	1,265	•	-
Defense Health Prg	<u> </u>	<u> </u>	<u>4,146</u>	4,135
Total	3,998	4,009	4,146	4,135

The figures shown above for Health Professions Scholarships are actuals for FY 1990 and FY 1991; FY 1992 and FY 1993 figures are those currently authorized by DoD from the total of 5,000 authorized scholarships.

Junior ROTC is a program designed to develop leadership qualities, good citizenship, and an understanding of the basic elements of national security among high school students. Despite its name, it is not an officer acquisition program since it does not result in a commission and its participants do not incur any military obligation. Junior ROTC is not included within training loads covered by this report.

TABLE IV-3. Total Officer Acquisition Training Load

Service Component	FY 87	FY 88	<u>FY 89</u>	<u>FY 90</u>	<u>FY 91</u>	FY 92	FY 93
Army Active	5,741	6,407	6,853	6,423	5,053	5,092	4,913
Reserve Natl Guard	1,375 81	1,388 113	1,177 123	1,758 155	1,272 90	1,478 82	1,467 121
Navy							
Active Reserve	6,280 0	6,415 68	6,546 68	6,631 15	6,222 15	5,962 15	5,950 15
Marine Corps							
Active	433	311	364	358	404	404	394
Reserve	243	272	247	187	113	168	159
Air Force							
Active	5,512	5,283	5,526	4,915	6,148	6,218	6,511
Reserve	15	20	20	8	15	16	16
Natl Guard	0	0	0	0	0	0	0
DoD							
Active	17,966	18,416	19,289	18,327	17,827	17,676	17,768
Res/Gd Total	<u>1,714</u>	<u>1,861</u>	<u>1,635</u>	<u>2,123</u>	<u>1,505</u>	<u>1,759</u>	<u>1,778</u>
Total	19,680	20,277	20,924	20,450	19,332	19,435	19,546

Officer Requirements and Structuring the Officer Acquisition Program

Requirements for new officers, like requirements for new enlisted personnel, are a product of the need for officers in the projected force as compared to the projected future inventory of officers. Properly functioning programs fill the gross requirements for officer entrants for any given year and provide an even flow of sufficient new officers to each Service to avoid the emergence of unmanageable shortages and overages by age and grade in the future. Each of the Services uses a mix of sources for new officers.

Officer Acquisition Training may be divided into six separate programs:

Service Academies

ROTC

Off-Campus Commissioning Programs

Other Enlisted Commissioning Programs

Health Professions Acquisition Programs

The mix of officer acquisition programs used must recognize the characteristics of each source. Some of the differing characteristics of current programs are: stable input, long lead-time; flexible input, short lead-time; high academic quality with comprehensive military indoctrination; and high level of technical skill. Additionally, consideration must be given to each program's ability to attract applicants, the quality of the graduates, and their probable retention and attrition. These differences and others are recognized and exploited in planning officer procurement.

The Service Academies present a long lead-time program that produces highly trained career military officers.

ROTC is also a long lead-time program and provides the largest single input of officers to the active duty force, although many of these officers will leave active duty and join the Reserve Components. In this manner, ROTC provides officers to support the total force, both active and reserve.

Officer Candidate/Training Schools provide the short lead-time commissioning source necessary to respond to immediate surges in officer requirements, since the programs can be expanded or reduced in a relatively short period of time.

The Off-Campus Commissioning Programs, such as the Marine Corps Platoon Leader Corps (PLC) program, are long lead-time programs that provide a student at four-year colleges or universities the opportunity to earn a commission by training only in the summer but without military responsibilities during the school year.

Other Enlisted Commissioning Programs are relatively long lead-time in nature and provide a source of officers who possess specific technical skills and who have a proven high rate of retention. The lead-time for Other Enlisted Commissioning Programs is generally shorter

than for Service Academies or ROTC programs since most participants have previous college credits and require less time to complete their program.

In addition to the practical considerations discussed above, having a variety of officer commissioning sources opens officership opportunities to a wide segment of the population and provides advancement opportunities for highly qualified enlisted personnel.

Service Academies

The mission of each of the Service Academies (United States Military Academy, United States Naval Academy, and United States Air Force Academy) is to meet a portion of the long-range requirement for career military officers. They provide instruction and experience to cadets or midshipmen so that they graduate with the knowledge and character essential to leadership and with the motivation to become career officers. Cadets and midshipmen receive a rigorous four-year undergraduate college education which includes a technically oriented core curriculum regardless of major. Successful completion of the specified academic, leadership and military requirements entitles the graduate to a Bachelor of Science degree and a Regular commission in one of the Military Services. Up to one-sixth of each year's Naval Academy graduates may be commissioned in the Marine Corps.

The Service Academies are distinctive in that their curricula are specifically designed to prepare young men and women for duty as professional officers. The total curriculum at each Academy is designed to develop the qualities of character, intellect, and physical competence needed by the officer who may, in the course of a full career, be called upon to perform duties ranging from leading a small combat unit to advising the highest government councils. The curricula, which include the sciences, the humanities, and military and physical training, form the basis for further professional development or, when required, graduate education.

The enrollment of each of the Service Academies is established by law. This fact establishes stable training loads for the Academies. Training load data for the Service Academies are shown in Table IV-4.

TABLE IV-4. Training Input, Output, and Load

<u>Service</u>	<u>FY 90</u>	FY 91		FY 92			FY 93	
Component	Load	Load	Input	Output	Load	Input	Output	Load
Army Navy Air Force	5,422 4,356 <u>4,364</u>	4,365 4,153 <u>4,433</u>	1,220 1,180 <u>1,255</u>	959 1,021 <u>1,058</u> .	4,296 4,079 <u>4,300</u>	1,220 1,200 <u>1,200</u>	1,013 1,059 <u>935</u>	4,177 4,063 4,200
Total	14,142	12,951	3,655	3,038	12,675	3,620	3,007	12,440

Each of the Military Departments sponsors an Academy preparatory school. Marine Corps and Coast Guard personnel attend the Navy school. The missions of these schools are to provide approximately one year of intensive instruction and guidance to selected enlisted personnel in preparation for entry to the Service Academies. Students compete for nominations by the Secretaries of the Military Departments and from other sources. The Naval Academy Preparatory School also provides instruction to candidates for the Marine Corps Enlisted Commissioning Education Program during the summer months. Training load data for the Academy preparatory schools is shown in Table IV-5.

TABLE IV-5. Training Input, Output, and Load, Academy Preparatory Schools

<u>Service</u>	FY 90	FY 91		FY 92			_FY 93	
Component	Load	Load	<u>Input</u>	Output	Load	Input	Output	Load
Army	216	212	315	182	213	315	182	213
Navy	173	158	247	178	159	230	178	159
Marine Corps	11	11	15	11	11	15	11	11
Air Force	<u>248</u>	<u>211</u>	<u>240</u>	<u>203</u>	<u>222</u>	<u>240</u>	<u>203</u>	222
Total	648	592	817	574	605	800	574	605

ROTC Programs

ROTC is a long lead-time program which is the single largest source of officers for the Armed Forces. Like the Service Academies, ROTC is used to provide a relatively constant input of officers for active duty. The program is currently conducted at over five hundred civilian colleges and universities throughout the nation. The Army, Navy, and Air Force each sponsor a ROTC program. Up to one-sixth of the Navy ROTC graduates may be commissioned into the Marine Corps. Scholarships and subsistence allowances authorized by law, in addition to conventional recruiting and advertising methods, are used to attract qualified students. Scholarships are awarded to young men and women who exhibit potential ability as officers and have interests in fields of projected Service needs.

There are both scholarship and non-scholarship, as well as two-year and four-year, ROTC programs. The curriculum of each program is tailored to the needs of the individual Services. For example, the Navy teaches the basics of ship navigation, while the Army teaches the fundamentals of ground combat and the Air Force provides basic instruction in aerospace history and doctrine. Each of the programs includes instruction in leadership, military customs and military history, and each program provides prospective officers with a gradual transition from the civilian environment to the military environment. Each ROTC program consists of a series of regularly scheduled academic classes throughout the school year combined with mandatory summer camps or cruises that are designed to give the student realistic military experience and a first-hand view of military life.

The ROTC scholarship continues to be an important incentive to attract exceptionally qualified individuals to ROTC. The rising cost of education makes the scholarship even more attractive. Currently, the following numbers of scholarships are authorized by law: Army- 12,000, Navy- 5,266, Air Force- 9,500. Due to resource constraints, the Navy will be able to fund only of 5,174 scholarships in FY 1993. The Army will fund 8,600 scholarships and the Air Force 3,078 scholarships in FY 1993.

Reduced force structure requires fewer officers and the ROTC Program is being downsized accordingly. The Army now has 350 host institutions, the Navy has 53, and the Air Force has 147.

As noted at the beginning of this chapter, the ROTC program is not included in Service training loads because the students are not in an active military status. The following table shows the three Service ROTC programs for FY 1992 and FY 1993.

TABLE IV-6. Senior ROTC Programs

FY 1992 Service	Beginning Enrollments	<u>Graduates</u>	Average Enrollments	Average Number of Scholarship Enrollees
Army Navy Air Force	43,904 8,250 <u>12,847</u>	4,661 1,677 <u>1,835</u>	42,148 8,416 <u>12,042</u>	9,000 5,477 <u>3,253</u>
Total	65,001	8,173	62,606	17,730
FY 1993 Service	Beginning Enrollments	<u>Graduates</u>	Average <u>Enrollments</u>	Average Number of Scholarship Enrollees
Army Navy Air Force	43,412 8,150 <u>12,144</u>	4,216 1,470 <u>1,515</u>	41,345 8,169 <u>11,366</u>	8,600 5,174 <u>3,078</u>
Total	63,706	7,201	60,880	16,852

Off-Campus Commissioning Programs

The only Officer Acquisition Training program off the college campus is the Marine Corps Platoon Leaders Class (PLC). This program provides for enlistment as a Marine Corps Reservist while the student is still an undergraduate. All PLC training takes place in the summer. For freshmen and sophomores, PLC consists of two six-week training sessions at the Marine Corps Officer Candidate School in Quantico, Virginia. Juniors attend one tenweek session.

Students participating in this program attend either one or two summer training sessions, depending upon when during their college career they were enrolled. The objective of the program is to indoctrinate, motivate and train the enrollees by providing instruction in basic military subjects, leadership and physical conditioning. PLC students are commissioned when their college degrees are conferred. Newly commissioned Marine Corps officers then attend The Basic School at Quantico, Virginia.

The training loads in Table IV-7 are based only on the time spent in summer training.

TABLE IV-7. Training Input, Output, and Load, Off-Campus Commissioning Programs

<u>Service</u>	FY 90	FY 91		FY 92			FY 93	
Component	Load	Load	Input	Output	Load	<u>Input</u>	Output	Load
Marine Corps Reserve	187	113	1,526	1,150	168	1,456	1,115	159

Officer Candidate Schools (OCS)

Each of the Military Services operates an Officer Candidate School. The Air Force school is entitled Officer Training School (OTS).

Enlisted members can use this route to "rise from the ranks." The existence of OCS and the other enlisted commissioning programs covered in the next section is a significant advancement incentive to ambitious and promising enlisted personnel.

The four Services offer direct entry into OCS to selected college graduates without previous enlisted service. Some college students in highly specialized academic disciplines, such as engineering and physical sciences, cannot afford the time required to participate in ROTC. The OCS program commissions well qualified college students who desire to become officers after graduation. Because of reductions in officer end strength, Officer Candidate School workloads have decreased.

The following tables show length and load data for Officer Candidate Schools.

TABLE IV-8. Course Lengths (Weeks), Officer Candidate Schools

Army OCS	Navy <u>OCS</u>	Marine Corps <u>OCS</u>	Air Force <u>OTS</u>
10	16	10	14

TABLE IV-9. Training Input, Output, and Load Officer Candidate Schools,

Service	<u>FY 90</u>	FY 91		FY 92			FY 93	
Component	Load	Load	<u>Input</u>	Output	Load	<u>Input</u>	Output	Load
Army								
<u>Army</u> Active	120	195	1 200	1 176	212	1 2 40	1 005	210
Reserve			1,299	1,176	212	1,349	1,227	218
	18	5	104	88	18	56	49	8
Natl Guard	46	50	200	196	24	375	330	67
<u>Navy</u>								
Active	520	271	386	371	190	386	371	199
Reserve	0	0	0	0	0	0	0	0
							_	_
Marine Corps								
Active	58	102	710	447	109	563	374	87
Reserve	0	0	. 0	0	0	0	0	0
Air Force								
Active	155	116	402	350	90	2,265	1,970	510
Reserve	8	15	75	64	16	75	64	16
Natl Guard	Ü	10	75	04	10	75	04	10
<u>DoD</u>								
Active	853	684	2 707	2 244	6 01	4 562	2.042	1 01 4
			2,797	2,344	601	4,563	-	1,014
Res/Gd Total	<u>72</u>	<u>70</u>	<u>379</u>	<u>348</u>	<u>58</u>	<u>506</u>	<u>443</u>	<u>91</u>
Total	925	754	3,176	2,692	659	5,069	4,385.	1,105

Other Enlisted Commissioning Programs

The Services each have enlisted commissioning programs in addition to Officer Candidate Schools. The purposes of these programs are: (1) to provide a source of officers in specific skills with an expected high rate of retention; (2) to provide an avenue whereby enlisted personnel with proven qualifications can augment the commissioned ranks; and (3) to provide a measure of motivation to enlisted personnel. The Navy's Enlisted Commissioning Programs now number five. A similar program, the Marine Enlisted Commissioning Education Program, has been expanded to offer degrees in technical and liberal arts academic disciplines. Students in the USAF Airman Education and Commissioning Program (AECP) major in engineering and computer science or physical science, with matriculation up to three years. The average academic time spent in the program is about 27 months. In the Navy, Marine Corps and Air Force, participants attend the Officer Candidate School of their Service before they are commissioned. Like OCS/OTS, these education programs carry an active duty service requirement. In FY 1988 the Army began reporting the warrant officer certification program in this category. While the other Services' participants are all on active duty, the Army's program also includes members of the Reserve and National Guard.

During FY 1986 the Navy instituted the Officer Sea and Air Mariner (OSAM) Program which provides officer accessions directly into the Naval Reserve. The program covers all phases of training from Officer Candidate School to specific training in a designated warfare specialty. Training is completed after approximately two years and individuals are released from active duty to complete a four-year drilling obligation with the Selected Reserve.

The following table displays load data for these programs. All participants are members of the active forces.

TABLE IV-10. Training Input, Output, and Load
Other Enlisted Commissioning Programs

<u>Service</u>	<u>FY 90</u>	FY 91		FY 92			FY 93	
Component	Load	Load	Input	Output	Load	Input	Output	Load
Army Navy Marine Corps Air Force	668 1,395 289 100	197 1,655 291 <u>69</u>	1,137 1,250 96 	1,020 1,050 99 <u>36</u>	279 1,549 284 <u>178</u>	962 1,244 105 	848 1,044 89 <u>14</u>	241 1,544 296 149
Total	2,452	2,212	2,583	2,205	2,290	2,411	1,995	2,230

Health Professions Acquisition Programs

This subcategory may be conveniently divided into two parts, the Armed Forces Health Professions Scholarship Program and the Uniformed Services University of the Health Sciences Program.

The Health Professions Scholarship Program was established in 1972 by Public Law 92-426. Participants are selected from among students or those accepted for enrollment in recognized health professions schools. Participants are commissioned in grade 0-1 in the Reserve of their parent Service, but except for a short period of annual active duty are not in active status. They are, therefore, not included in the training loads of their Services. Upon graduation, participants must serve obligated tours of duty, the length of which depends on the length of their participation in the program.

The program is authorized a total of 5,000 scholarships at its current level. Service data for FY 1992 and FY 1993 are shown in Table IV-11.

TABLE IV-11. Health Professions Acquisition Program, Scholarships Awarded and Graduates, FY 1992 and 1993

F	Y	1	9	9	2

Service	Scholarships	FY 1992 Graduates
Army	1,357	362
Navy	1,429	343
Air Force	<u>1,496</u>	<u>407</u>
DoD Total	4,282	1,112
FY 1993		
Service	Scholarships	FY 1993 Graduates
Army	1,351	365
Navy	1,448	417
Air Force	<u>1,493</u>	<u>391</u>
Total	4,292	1,173

An additional acquisition program for health professionals, the Uniformed Services University of the Health Sciences (USUHS), began operation in 1976. In accordance with PL 92-426, the student body of the USUHS is composed of commissioned officers of the Uniformed Services. The first students graduated from this program in 1980.

The USUHS will, over the long term, provide approximately 25 percent of DoD's projected physician requirements. Training information for this DoD school is shown in Table IV-12.

TABLE IV-12. USUHS Training Input, Output, and Load

<u>Service</u>	FY 90	FY 91	<u> 91 FY 92 </u>		FY 93			
Component	Load	Load	Input	Output	Load	Input	Output	Load
Defense Agenc	ies 490	608	158	165	616	158	162	605

The Air Force also fulfills some of their needs for new doctors through training at civilian institutions. The following table is new to the MMTR this year.

TABLE IV-13. Other Health Professions Acquisition Training

<u>Service</u>	<u>FY 90</u>	<u>FY 91</u>	FY 92			FY 93		
Component	Load	Load	<u>Input</u>	<u>Output</u>	Load	Input	Output	Load
Air Force	-	1,271	440	397	1,380	400	404	1,380

SPECIALIZED SKILL TRAINING

General Description

Specialized Skill Training provides officer and enlisted personnel with skills and knowledge needed to perform specific jobs. Each Service has established a job structure that makes it possible to carry out assigned missions. Each Service's mission is supported by an established job structure and each position within that job structure has been analyzed to determine the skill it requires. Specialized Skill Training provides these required skills to the proper number of individuals in a phased manner so that each vacancy in the structure can be filled promptly with a qualified replacement.

Specialized Skill Training, as used in this report, is defined as:

Initial, progression and functional training for both officers and enlisted personnel. Specialized Skill Training includes such programs as Army Advanced Individual Training, Navy Apprenticeship Training and Marine Combat Training. This training category also includes aviation-related ground training and initial enlisted leadership training below the level of that carried in Professional Development Education.

Army One-Station Unit Training (OSUT) provides Army personnel with job-related training in a number of skills. However, since OSUT is conducted as one course which combines Recruit and Specialized Skill Training, it is treated separately in this report (see Chapter III). OSUT loads are not included in the Specialized Skill Training loads in this chapter.

Specialized Skill Training loads for Active personnel will increase 1,827 or 2 percent between FY 1991 and FY 1992 and decrease 419 or 1 percent between FY 1991 and FY 1993. Reserve Components training loads increased about 23 percent from FY 1991 to FY 1992 and about 11 percent from FY 1991 to FY 1993. Although entry level training for enlisted personnel makes up 80 percent of total Reserve Component training loads, Reserve and Guard officers and enlisted personnel beyond the initial entry stage are also trained by the Active establishment. DoD wide, the requirement to improve the technical skills of career personnel to keep pace with new equipment acquisition and modifications to the existing inventory will continue into the foreseeable future, and this is reflected in the estimated Specialized Skill Training load.

Specialized Skill Training loads for FY 1987 through FY 1993 are as shown in Table V-1.

Table V-1. Specialized Skill Training Load

Service Component	<u>FY 87</u>	<u>FY 88</u>	FY 89	<u>FY 90</u>	<u>FY 91</u>	FY 92	<u>FY 93</u>
Army a/ Active	39,220	38,554	40,641	40,438	32,103	36,197	36,327
Reserve	6,856	6,613	6,305	7,502	6,036	7,514	6,805
Natl Guard	7,159	7,435	6,976	9,189	6,309	6,864	5,643
Navy							
Active	41,663	43,158	41,023	39,283	36,763	33,545	31,076
Reserve	1,607	1,775	1,497	1,253	1,213	1,318	1,217
Marine Corps							
Active	9,248	8,580	8,470	10,456	9,046	8,686	8,697
Reserve	1,534	1,399	1,228	2,356	1,145	1,558	1,634
Air Force							
Active	21,638	17,858	13,294	15,521	10,833	12,144	12,226
Reserve	1,306	1,254	1,078	654	537	975	1,008
Natl Guard	1,850	2,031	1,660	1,475	1,470	2,252	2,305
<u>DoD</u>							
Active	111,769	108,150	103,428	105,698	88,745	90,572	88,326
Res/Gd Total	20,312	20,507	18,744	22,429	<u>16,710</u>	20,481	18,612
Total	132,081	128,657	122,172	128,127	105,455	111,053	106,938

a/ Army One-Station Unit Training load is not included.

As in the other types of training covered in this report, the demand placed on the training establishment for individuals is determined by comparing projected requirements for each skill and skill level with the projected future inventory of trained service members.

When anticipated losses are deducted from the current inventory, shortages in various skill areas are revealed. These shortages, except for those that can be satisfied through on-the-job training, or, in a few cases, through lateral entry from civilian life of individuals who already possess needed job skills, create a demand for a phased output of trained replacement personnel. Also, estimates are made of the proportion of students in each training course who will fail to complete the course. These course attrition factors determine the inputs necessary to achieve the desired course outputs. Inputs, outputs,

attrition patterns, and course lengths determine the training loads. These factors are discussed for each sub-category of Specialized Skill Training in the remainder of this chapter.

One of the challenges facing the Reserve Components is matching an individual's occupational specialty to a specific billet. The majority of the specialties or ratings require formal school training prior to designation. Since limited availability for active duty prevents members of the Selected Reserve from attending many formal schools, initial skill training programs are being developed to train prior-service Reservists in selected occupational specialties using combinations of two-week formal schools, on-the-job training, correspondence courses, mobile training teams and civilian vocational technical courses.

Specialized Skill Training is the most diverse of the major categories of individual training. In the interest of clarity, the full category has been divided into five sub-categories. Two are concerned with initial skill training, one for officers, the other for enlisted personnel. Two others cover more advanced training, again divided by officer and enlisted. The last category covers both officer and enlisted training which conveys required knowledge or skills without changing the student's primary skill or skill level.

Initial Skill Training (Enlisted)

Initial Skill Training (Enlisted) includes all formal training normally given immediately after Recruit Training and leading toward the award of a military occupational specialty or rating at the lowest skill level. Successful completion of the training qualifies the enlisted member to take a position in the job structure of the Service and to progress to the journeyman level through job experience. Army One-Station Unit Training satisfies this same purpose but, because it combines the skill training with recruit training in a single course, it is treated separately in this report.

The great majority of Service recruits are drawn from the least skilled segment of the population. Most recruits are under age 21 and have little civilian job experience. In addition, some civilian specialties are not in demand in the military job structure, and many of the most important military skills have no civilian counterpart. Consequently, only a small number of people enter the Service with a skill that can be used with little or no additional training. Enlistees must be trained in a technical skill before they can become productive. Some skills can be acquired through experience and on-the-job training. The vast majority, however, are most effectively and efficiently learned through formal courses. In some situations, on board ship or in remote locations for example, the opportunity for on-the-job training is limited.

Load data for Initial Skill Training (Enlisted) are displayed in Table V-2. The classification of this training is determined by its purpose, rather than by whether entrants attend immediately after Recruit Training. Thus some prior-service students and cross-trainees from other skill areas are reflected in these data.

TABLE V-2. Training Input, Output, and Load Initial Skill Training (Enlisted)

Service	FY 90	FY 91		FY 92			FY 93		
Component	Load	Load	<u>Input</u>	Output	Load	Input	Output	Load	
<u>Army</u>									
Active	15,052	12,162	53,306	50,566	11,252	62,338	59,143	13,665	
Reserve	5,232	3,883	25,031	23,453	4,559	22,223	20,757	4,052	
Natl Guard	6,248	4,220	22,879	21,554	4,582	17,515	16,432	3,589	
<u>Navy</u>									
Active	19,400	17,846	102,627	97,111	16,362	93,102	88,161	14,911	
Reserve	940	921	5,215	4,970	842	4,753	4,523	776	
Marine Corps									
Active	4,459	4,615	28,947	27,803	4,384	27,893	26,821	4,275	
Reserve	1,575	693	7,387	7,011	1,070	7,649	7,363	1,119	
Air Force									
Active	9,594	6,332	29,490	29,453	6,768	29,490	28,900	6,705	
Reserve	508	425	3,170	2,897	697	3,170	3,106	721	
Natl Guard	1,129	1,165	7,469	6,842	1,644	7,469	7,171	1,681	
<u>DoD</u>									
Active	48,505	40,955	214,370	204,933	38,766	212,823	203,025	39,556	
Res/Gd Tot	<u>15,632</u>	<u>11,307</u>	<u>71,151</u>	<u>66,727</u>	<u>13,394</u>	<u>62,779</u>	<u>59,352</u>	<u>11,938</u>	
		#							
Total	64,137	52,262	285,521	271,660	52,160	275,602	262,377	51,494	

New mission requirements and technological change have resulted in consolidating or splitting skill areas and extensive modification of existing training programs. For instance, the introduction of word processors and microcomputers into Air Force personnel, administration and resource management has increased the percentage of new accessions requiring formal training for these skills.

Reserve trainees graduating from Recruit Training proceed to Initial Skill Training in their occupational specialty. This may consist of a course in a Service school or Advanced Individual Training at an Army training center. If a course in the proper skill is not available, the trainee may be assigned to on-the-job training in an active duty for training status. The actual length of active duty training, in comparison with the statutory twelve weeks minimum, varies from twelve weeks to twelve months, depending on the occupational

specialties involved. To accommodate the Reserve Component member, the split-training program allows completion of initial entry training in a two training segments in a two-year period.

The variety of skills required in the four Services dictates a large number of courses for enlisted personnel in Initial Skill Training, as shown in the following table.

TABLE V-3. Number of Courses, Initial Skill Training (Enlisted)

	Army	<u>Navy</u>	Marine Corps	Air Force
FY 1992	320	139	228	284
FY 1993	305	136	225	284

Course lengths vary widely based on the complexity of the subject matter. For example, the Air Force course for cytotechnology specialists is 52 weeks long; but the course for packing specialist is only 3 weeks long. Table V-4 shows the average course lengths for the Services' Enlisted Initial Skill Training.

TABLE V-4. Average Course Lengths, Initial Skill Training (Enlisted)
(Academic Days In Training)

	Army	Navy	Marine Corps	Air Force
FY 1992	52	49	64	57
FY 1993	54	48	61	57

Initial Skill courses include general skills, intelligence, cryptography and health service training. Some of these courses (for example, nuclear reactor specialist or electronics technician) are highly technical. Others involve less complex skills -- cook, clerk-typist, and vehicle driver. A sampling of high-volume courses is shown in the Table V-5.

TABLE V-5. Initial Skill Training Courses with High Student Flow FY 1993

Army a/	Student <u>Input</u>	Course Length (in weeks)
Medical Specialist	9,782	10.0
Motor Transport Operator	4,401	9.0
Administrative Specialist	4,063	8.0
Petroleum Supply Spec	2,936	9.0
Light Wheeled Vehicle Mechanic	2,759	13.0
Food Service Specialist	2,700	9.0
Navy		
Apprentice Training b/	20,195	2.7
Hospital Corpsman Basic	3,940	14.0
Avionics Technician "A" School	3,039	27.7
Electronics Technician "A" Phase II	2,752	23.4
Electronics Technician "A" Phase I	2,350	16.7
Nuclear Field "A" School Machinist	2,323	11.7
Marine Corps		
Rifleman	5,739	7.0
Basic Typing	2,194	2.0
Field Radio Operator	1,928	8.0
Motor Vehicle Operator	1,658	5.0
Mortarman	1,184	7.0
Administrative Clerk	1,132	7.0
Air Force		
APR Security Specialist	2,813	5.6
Medical Service Specialist	1,780	13.6
APR Information Mgmt Specialist	1,493	4.2
APR Law Enforcement Specialist	1,289	5.4
APR Fire Protection Specialist	1,115	7.4
APR Air Traffic Control Specialist	787	15.0

a/ Many of the Army high-volume skills and most combat skills (armor crewman, artilleryman, etc.) are trained through One-Station Unit Training (OSUT).

b/ Apprentice Training is composed of fundamental training in one of four basic skill areas: Seaman, Fireman, Airman, Constructionman. The course length shown is the average for those four skills.

The final determinant of training loads is the anticipated rate of attrition. Attrition rates must be estimated for each course. A routine course may have low attrition, but attrition may run high in complex technical courses. Unlike Recruit Training, students who fail Initial Skill Training are not discharged but retrained in other, less difficult skills. The average anticipated attrition rates are shown below.

TABLE V-6. Average Attrition Rates, Initial Skill Training (Enlisted), (Percent)

	Army	<u>Navy</u>	Marine Corps	Air Force
FY 1992	5.8%	4.0%	2.7%	5.8%
FY 1993	5.9%	5.0%	2.8%	5.8%

Skill Progression Training (Enlisted)

This sub-category covers skill training received by enlisted personnel after Initial Skill Training. Through this training the student gains the knowledge to perform at higher skill levels or in a supervisory position. Skill Progression Training is most frequently given after Service members have gained experience through actual work in their specialty. In some cases, however, training in a relatively narrow subject area as an immediate follow-on to Initial Skill Training is included in Skill Progression Training.

Training load data for Skill Progression Training (Enlisted) are shown on Table V-7.

TABLE V-7. Training Input, Output, and Load Skill Progression Training (Enlisted)

Service	FY 90	FY 91		FY 92			FY 93	
Component	Load	Load	<u>Input</u>	Output	Load	Input	Outpu	t Load
			_	-		_	_	
<u>Army</u>								
Active	10,276	8,317	77,266	73,376	10,637	63,754	60,708	9,020
Reserve	631	399	2,580	2,217	724	2,400	2,094	673
Natl Guard	930	444	4,639	4,280	788	3,733	3,440	626
No								
Navy	10 505	10 (07	04.264	00 540	11.050	00.404	04.000	10.665
Active	13,585	12,627	94,364	90,548	11,278	88,401	84,823	10,665
Reserve	96	139	3,290	3,199	261	3,073	2,988	239
Marine Corps								
Active	1,992	1,357	13,244	13,046	1,585	13,380	13,185	1,589
Reserve	[′] 47	33	231	227	28	367	363	44
Air Force								
Active	5,015	3,640	66,525	66,241	4,495	69,979	69,078	4,652
Reserve	102	74	2,864	2,617	205	2,864	2,807	213
Natl Guard	272	213	6,227	5,704	447	6,227	5,978	459
DoD								
Active	30,868	25,941	251,399	243,211	27,995	235,514	227,794	25 026
Res/Gd Tot	,	•	•	•	•	•	•	25,926
Res/Ou Tot	<u>2,078</u>	<u>1,302</u>	<u>19,831</u>	<u>18,244</u>	<u>2,453</u>	<u>18,664</u>	<u>17,670</u>	<u>2,254</u>
Total	32,946	27,243	271,230	261,455	30,448	254,178	245,464	28,180

The requirement for Skill Progression Training arises from the fact that training in a skill at entry level and subsequent experience do not, in many cases, fully qualify service members to do the more advanced jobs in their field. Several factors may contribute, singly or in combination, to a need for additional formal training:

- 1. The introduction of new equipment.
- 2. The need to produce a higher degree of skill in a sub-specialty.
- 3. The need to impart a broader base of knowledge to qualify an individual for a supervisory responsibility.

4. The requirement for refresher training to bring the Service member up to date on the latest information and techniques in a skill.

As in all other types of training, the primary need is to have trained individuals available to replace losses as they occur. Planning future training in this sub-category follows the same general pattern as for Initial Skill Training. Some additional complications, however, are introduced by the fact that members eligible for schooling are frequently serving overseas or on board ship, rather than flowing from the Recruit Training pipeline. This situation frequently requires that personnel receive the training when they are available, preferably between duty assignments, rather than when they might more easily be accommodated for formal school training. Reserve Component personnel have similar difficulties because of civilian employer commitments.

The following table displays course data for Skill Progression Training for each of the Services.

TABLE V-8. Courses, Course Lengths, and Projected Attrition,
Skill Progression Training (Enlisted)

	Army	Navy	Marine <u>Corps</u>	Air <u>Force</u>
Number of Courses Average Course Lengths	469	1,658	537	507
(Academic Days) Projected Attrition	36	40	40	19
Rate (Percent)	4.8%	3.0%	1.1%	2.1%

The Air Force's average days in training is low compared to the other Services because of the heavy use of short courses. The large number of Navy courses is a reflection of the many Navy occupational subspecialties.

Initial Skill Training (Officer)

As a general rule, Officer Acquisition Training is oriented toward the broad educational background and general military training which is considered necessary for all officers entering a Service. Most newly commissioned officers require further training for the specific type of duty they will be performing in their first duty assignment. Initial Skill Training for officers is, therefore, analogous to Initial Skill Training for enlisted personnel. Both provide the job-oriented training which, added to the military fundamentals learned earlier, prepares the individual for taking a place in the job structure.

Load data for Initial Skill Training (Officer) are displayed in Table V-9.

TABLE V-9. Training Input, Output, and Load, Initial Skill Training (Officer)

<u>Service</u>	FY 90	FY 91		FY 92			FY 93	
Component	Load	Load	Input	Output	Load	Input	Output	Load
<u>Army</u>								
Active	2,213	1,756	9,639	9,465	2,438	7,381	7,257	1,929
Reserve	945	1,286	5,786	5,672	1,384	6,159	6,049	1,459
Natl Guard	1,212	868	2,902	2,832	717	2,558	2,501	649
<u>Navy</u>								
Active	1,059	1,024	4,089	3,952	1,188	3,318	3,198	1,022
Reserve	26	21	214	211	48	191	188	44
11000110			21.	211	10	1/1	100	-1-1
Marine Corps								
Active	1,133	480	2,185	2,159	458	2,224	2,197	466
Reserve	2	19	77	71	16	83	75	17
Air Force						•		
Active	345	348	1,707	1,704	384	1,707	1,673	382
Reserve	10	9	137	125	27	137	134	28
Natl Guard	30	43	457	418	91	457	438	94
DoD		•						
<u>DoD</u> Active	4.750	2 600	17 620	17 200	4.460	14 (20	14 205	2 700
	4,750	3,608	17,620	17,280	4,468	14,630	14,325	3,799
Res/Gd Tot	<u>2,225</u>	<u>2,246</u>	<u>9,573</u>	<u>9,329</u>	<u>2,283</u>	<u>9,585</u>	<u>9,385</u>	<u>2,291</u>
Total	6,975	5,854	27,193	26,609	6,751	24,215	23,710	6,090

With minor exceptions, all newly commissioned Army officers attend officer basic courses at their branch schools -- Infantry officers at the Infantry School, Engineer officers at the Engineer School, and so forth. These courses average 12 weeks in length and officers attend before reporting to their first unit of assignment. In addition, certain officers are selected to attend follow-on skill or functional training courses for more specialized assignments.

All submarine and nuclear officers and most Surface Navy officers go to Initial Skill Training. The Navy provides 21 courses for officers in Initial Skill Training, with an average course length of 103 days.

All newly commissioned Marine Corps officers attend a basic course for general orientation and training. In addition, most Marine Corps officers attend one of the 53 Initial Skill Training courses sponsored by the Corps. They may also participate in others conducted by the Navy or other Services. Such courses average 84 days in length and are related to specific officer jobs.

The Air Force conducts 30 Initial Skill Training courses for officers with an average length of 52 days. About 78 percent of newly commissioned officers attend these courses, some immediately after commissioning and others after spending some time at their first duty assignment.

Skill Progression Training (Officer)

Skill Progression Training for officers is, in general, aimed at officers with several years of practical experience and provides them knowledge needed to assume more advanced responsibilities. For example, the Army provides advanced courses which are structured to prepare the students for battalion and brigade staff duties in addition to command responsibilities at the company and battery level. Data for Skill Progression Training (Officer) are displayed in the following table.

TABLE V-10. Training Input, Output, and Load, Skill Progression Training (Officer)

Service	FY 90			FY 92			FY 9:	
Component	Load	Load	<u>Input</u>	Output	Load	Input	Outpu	it Load
Army								
Active	4,031	3,149	12,218	12,004	3,956	11,822	11,623	3,739
Reserve	186	118	3,070	2,996	187	3,843	3,765	230
Natl Guard	353	411	2,498	2,412	380	2,836	2,758	417
Navy								
Active	1,333	1,338	11,122	10,838	1,393	10,657	10,390	1,318
Reserve	55	33	465	463	52	451	449	50
Marine Corps								
Active	252	185	1,440	1,402	105	1,698	1,658	119
Reserve	6	4	256	249	17	259	244	19
Air Force								
Active	271	328	4,882	4,876	327	4,882	4,785	324
Reserve	11	10	307	281	20	307	301	20
Natl Guard	18	24	740	678	48	740	710	48
<u>DoD</u>							•	
Active	5,887	5,000	29,662	29,120	5,781	29,059	28,456	5,500
Res/Gd Tot	<u>629</u>	<u>600</u>	7,336	7,079	704	8,436	8,227	784
								
Total	6,516	5,600	36,998	36,199	6,485	37,495	36,683	6,284

The Army conducts 190 courses averaging 59 days in length. The Navy maintains 149 courses averaging 46 days in length. The Navy courses cover a variety of specialized duties that are typically performed by officers with several years of service; for example, aviation maintenance officer course and nuclear propulsion plant course.

Both the Marine Corps and the Air Force conduct broad courses for officers at about the same level as the Army's advanced courses; however, as these are Service-wide and uniform in content, they are carried in Professional Development Education in this report. Within Skill Progression Training, Marine Corps officers attend 264 courses, averaging 25 days in length. They also utilize the course offerings of the other Services. The Air Force has 157 courses, averaging 17 academic days each, which train officers in new duties required by their prospective assignments.

Attrition from the Skill Progression courses for officers is significantly lower than for enlisted or initial skill officer training. Attrition of one to two percent is typical of such courses.

The Air National Guard (ANG) also conducts specialized skill progression training in several aviation disciplines at ANG installations. Air Force facilities cannot be used for this training because of constrained training time available for the reservist, geographic dispersion of units, availability of training equipment and location of training areas.

Functional Training (Officer and Enlisted)

Functional Training is an "all other" sub-category covering those types of required training that do not fit neatly into the definitions of the other sub-categories. By and large, Functional Training is in subject areas that cut across the scope of military occupational specialties and provides additional required skills without changing the student's primary specialty or skill level. Both officers and enlisted personnel participate in Functional Training. Load data for Functional Training are shown in the Table V-11.

TABLE V-11. Training Input, Output, and Load, Functional Training
(Officer and Enlisted)

<u>Service</u>	FY 90	FY 91	<u></u>	FY 92			FY 93	
Component	Load	Load	Input	Output	Load	Input	Output	Load
Army								
Active	8,866	6,719	90,420	82,635	7,914	89,488	81,540	7,974
Reserve	508	350	7,507	6,544	660	6,837	6,120	391
Natl Guard	446	366	6,020	5,255	397	5,576	4,988	362
Navy								
Active	3,906	3,928	331,052	325,802	3,324	312,031	307,058	3,160
Reserve	136	99	14,187	13,904	115	13,360	13,092	108
Marine Corps								
Active	2,620	2,409	29,847	28,233	2,154	31,133	29,438	2,248
Reserve	726	396	6,464	6,101	427	6,674	6,292	435
Air Force						•		
Active	296	185	4,580	4,480	170	4,413	4,360	163
Reserve	23	19	873	852	26	863	852	26
Natl Guard	26	25	632	614	22	632	624	23
<u>DoD</u>								
Active	15,688	13,241	455,899	441,150	13,562	437,065	422,396	13,545
Res/Gd Tot	1,865	<u>1,255</u>	<u>35,683</u>	33,270	1,647	33,942	<u>31,968</u>	1,345
Total	17,553	14,496	491,582	474,420	15,209	471,007	454,364	14,890

Army Functional Training includes the airborne, ranger, and special forces qualification courses, many specialized NCO supervision courses, language training, and a number of courses related to specialized equipment (e.g., Satellite Communication Operation and Maintenance; 8-inch Atomic Projectile Assembly).

Navy Functional Training differs from that of the other Services because of the very high input to a large number of very short courses. Most of the training is conducted while the ship is in port and includes the following types of activity:

- 1. Shore training for shipboard teams (firefighting, damage control, anti-submarine warfare, and so forth).
- 2. Short basic or refresher courses at fleet training centers in the operation of equipment or systems (TOMAHAWK operations and maintenance, SH-60B system familiarization, and 50 cal. machine gun operations).
- 3. Shipboard in-port training assistance (combat systems, advanced acoustic analysis and command excellence seminar mobile training teams).
- 4. Precommissioning training for newly formed crews of ships under construction (damage control, Combat Information Center team training and radar navigation team training).

Marine Corps functional training provides skills necessary to perform a specific mission outside of the normal primary occupational specialty. Examples of functional training courses taught at Marine institutions are range officer, aerial observer, field grade officer winter warfare planning, scout/sniper, mountain survival and drill instructor training. The Marine Corps has undertaken a new program called "Marine Battle Skills Training" that will provide the individual Marine with the basic skills required to function in a combat environment and effectively contribute to unit defense. Approximately 31,000 Marines will participate in this training in FY 1992 and in FY 1993.

Marines continue to serve in worldwide locations where terrorism remains a constant threat. To meet this challenge, the Marine Corps has established a program of terrorism counteraction training. Classes range from two hours at recruit training to 25 hours for officer students at the Marine Corps Command and Staff College. Similarly, attendance has increased at other service schools whose curricula include counterterrorism. For FY 1992 and FY 1993, approximately 1000 Marines are expected to attend specialized skill schools where these measures are taught.

Most Air Force Functional Training is survival training related to various environments: water, arctic, jungle, or tropic. These courses train air crews in the skills for long-term combat survival and survival in chemically, biologically, and radiologically contaminated environments.

The following table provides course data for Functional Training.

TABLE V-12. Courses and Course Length, Functional Training

	Army	Navy	Marine <u>Corps</u>	Air Force
FY 92 Number of Courses	1,266	764	90	8
Average Course Length (Days)	18	3	13	18 /
FY 93 Number of Courses	1,235	745	95	8
Average Course Length (Days)	19	3	14	18

FLIGHT TRAINING

General Description

Flight Training programs provide basic flying skills required prior to operational assignment of pilots, navigators, and naval flight officers. Most of the training in this category is undergraduate flight training. At the conclusion of this training, a graduate is awarded "wings" and is classified as a "designated" or "rated" officer. Flight Training includes programs for pilots of all Services, navigators in the Air Force, and naval flight officers in the Navy and Marine Corps. Pilot training may be in jet or propeller-driven fixed wing aircraft, or in helicopters. Some related advanced flight training, such as Army instructor pilot training is also included in Flight Training. Enlisted programs in aviation related subjects (for example, in air traffic control) and Air Force survival training are in Specialized Skill Training. Marine Corps enlisted navigator training is included in Flight Training.

Beginning in FY 1986, the Navy opened flight training to a limited number of reservists to fill critical billets as Naval Flight Officers. The students enter the pipeline on extended active duty and are trained at the Aviation Officers Candidate School (AOCS) with their active duty counterparts. After completing all formal specific aircraft training, they are released from active duty to receive their proficiency training with a Naval Air Reserve squadron. The proficiency or operational training is not included in the training loads of this report.

Generally, Reserve Component participation in Flight Training is relatively minor, since most aviator requirements in Reserve units are filled by experienced aviators who join after extended service in the active components.

The Army plans to increase undergraduate helicopter pilot training for its Reserve Components. The result will be an increase in the Army's reserve pilot inventories and increase the deployability of reserve air detachments.

Flight Training loads, by Service and component, for Fiscal Years 1987 through 1993 are shown in Table VI-1.

Table VI-1. Total Flight Training Load

Service Component	<u>FY 87</u>	FY 88	FY 89	<u>FY 90</u>	FY 91	FY 92	<u>FY 93</u>
Army a/ Active	914	865	1,135	1,203	1,008	883	876
Reserve	106	87	88	112	71	78	65
Natl Guard	262	231	280	255	327	246	265
Navy							
Active	2,244	2,023	2,249	2,255	1,542	1,546	1,551
Marine Corps							
Active	617	534	513	572	504	580	573
Air Force							
Active	2,708	2,773	2,495	2,395	1,678	1,105	945
Reserve	46	62	50	60	52	69	85
Natl Guard	192	205	192	197	186	237	235
<u>DoD</u>							
Active	6,483	6,195	6,392	6,425	4,732	4,114	3,945
Res/Gd Tot	<u>606</u>	<u>585</u>	610	624	636	<u>630</u>	<u>650</u>
Total	7,089	6,780	7,002	7,049	5,368	4,744	4,595

For purposes of clarity, the following discussion of aviation training is divided into three sections -- Undergraduate Pilot Training, Navigator Training and All Other Flight Training.

Undergraduate Pilot Training

Undergraduate Pilot Training qualifies students to perform the flight duties and to assume the responsibilities of military pilots. Air Force courses include sufficient flying training to allow the student to attain proficiency in the general class of aircraft flown in future assignments. Flying training is augmented by flight-related ground training and simulator training. The Army uses a large number of warrant officer pilots. Enlisted entrants undergo warrant officer candidate training before entering flight phases of training and receive their warrants upon graduation from flight training. Some Army flight training students are already commissioned officers or warrant officers upon entry. The Navy conducts officer training for naval aviation officer candidates concurrent with the early phases of flight training.

Training data for FY 1990 through FY 1993 are displayed in the following table.

TABLE VI-2. Training Input, Output, and Load, Undergraduate
Pilot Training

Service	FY 90	<u>FY 91</u>		FY 92			FY 93	
Component	Load	Load	<u>Input</u>	Output	Load	Input	Output	Load
Army								
Active	948	760	1,860	1,820	647	1,853	1,814	647
Reserve	95	50	152	150	57	122	120	45
Natl Guard	208	283	432	426	161	432	426	162
Navy Active	1,635	1,073	840	766	1,023	979	676	1,054
Marine Corps Active	514	456	463	375	535	458	376	530
Air Force Active Reserve Natl Guard	1,597 56 144	1,173 47 148	938 75 205	870 50 139	841 58 160	625 94 205	750 60 164	640 72 172
DoD Active Res/Gd Total	4,694 <u>503</u>	3,462 <u>528</u>	4,101 <u>864</u>	3,831 <u>765</u>	3,046 <u>436</u>	3,915 <u>853</u>	3,616 770	2,871 451
Total	5,197	3,990	4,965	4,596	3,482	4,768	4,386	3,322

Load data for each Service for undergraduate helicopter pilot training are shown in Table VI-3.

TABLE VI-3. Training Input, Output, and Load, Undergraduate
Helicopter Pilot Training

<u>Service</u>	<u>FY 90</u>	FY 91		FY 92			FY 93	
Component	Load	<u>Load</u>	<u>Input</u>	Output	Load	<u>Input</u>	Output	Load
Army								
Active	948	760	1,860	1,820	647	1,853	1,814	647
Reserve	95	50	152	150	57	122	120	45
Natl Guard	208	283	432	426	161	432	426	162
Navy								
Active	515	317	276	276	317	335	226	328
Marine Corps								
Active Active	251	260	257	214	268	258	214	267
Air Force								
Active	18	- 29	0	0	0	0	0	0
Natl Guard	1	0	0	Ö	Ö	0	0	0
<u>DoD</u>								
Active	1,732	1,366	2,393	2,310	1,232	2,446	2,254	1,242
Res/Gd Total	<u>304</u>	333	<u>584</u>	<u>576</u>	218	554	546	207
					===	<u> </u>	<u>5 10</u>	<u> 207</u>
Total	2,036	1,699	2,977	2,886	1,450	3,000	2,800	1,449

The following table shows FY 1993 programmed course length and projected attrition rates for the Army undergraduate helicopter pilot training program.

TABLE VI-4. Course Length and Attrition Rates, Army Undergraduate
Helicopter Pilot Training

	Commissioned Officer Candidates	Warrant Officer Candidates
Course Length (weeks) Attrition Rate	47.0 2%	53.0 4%

The Army course is 6 weeks longer for warrant officer candidates than for commissioned officers since the course also serves as a warrant officer candidate school.

Navy Undergraduate Pilot Training begins with a common core of basic ground training and primary flight training and then diverges according to whether the student is to be qualified in jet aircraft, propeller aircraft or helicopters. The basic ground phase, or aviation preflight indoctrination, is six weeks in length for officer students and 14 weeks for aviation officer candidates. This phase also serves as an officer training period for the latter group.

The following table shows FY 1993 course length in weeks, attrition rates, and type of aircraft used for training for each phase of the syllabus.

TABLE VI-5. Course Phasing, Navy/Marine Corps
Undergraduate Pilot Training

Course/Phase	Course Length	<u>Attrit</u> Navy	ion Rate USMC	Type Aircraft
Commissioned Officers Aviation Pre-flight Indoctrination		200	100	27/4
indoctrination	6	3%	1%	N/A
Aviation Officer Candidates	14	9%	N/A	N/A
Primary Flight Training (Jet, Prop, Helo)	22	10%	10%	T-34C
Strike Training (Jet)				
Intermediate	22.8	5%	5%	T-2C
Advanced	24.6	7%	7%	TA-4J
Maritime Training (Pro	p)			
Intermediate	5.2	1%	1%	T-34C
Advanced	18.6	2%	2%	T-44A
E-2/C-2 Training				•
Intermediate Jet (CQ)	23.8	12%	N/A	T-2C
Advanced Prop	9.4	1%	N/A	T-44A
Helicopter Training	•			
Intermediate	5.2	1%	1%	T-34C
Advanced	21.4	3.5%	3.5%	TH-57

Because of the task requirements which dictate variations in course content, the standard Undergraduate Pilot Training course is as short as 55 weeks for an officer student qualifying in helicopters or as long as 82 weeks for an aviation officer candidate qualifying in jets. Actual course duration may be longer because of unforeseen circumstances such as major aircraft groundings, fuel shortages or inclement weather.

The following table displays load data for Navy and Marine Corps Undergraduate Pilot Training. All participants are in the active force.

TABLE VI-6. Training Input, Output, and Load, Navy/Marine Corps
Undergraduate Pilot Training

Service	<u>FY 90</u>	FY 91		FY 92)		FY 93	}
Component	Load	Load	Inpu	t Outpu	t Load	Input	Outpu	t Load
<u>Navy</u>								
Strike	671	447	269	205	378	306	205	392
Maritime	449	309	295	285	328	338	245	334
Helo	<u>515</u>	<u>317</u>	<u>276</u>	<u>276</u>	<u>317</u>	<u>335</u>	<u>226</u>	<u> 328</u>
Total	1,635	1,073	840	766	1,023	979	676	1,054
Marine Corps								
Jet	232	161	168	130	229	164	130	227
Prop	31	35	38	31	38	36	32	36
Helo	<u>251</u>	<u> 260</u>	<u>257</u>	<u>214</u>	<u> 268</u>	<u>258</u>	<u>214</u>	<u> 267</u>
Total	514	456	463		535	458	376	530

The final program of Undergraduate Pilot Training is training of Air Force fixed-wing jet pilots. Air Force helicopter pilots are trained in the Army program. The majority of Air Force fixed wing pilots are trained in the all-jet USAF Undergraduate Pilot Training program. The standard course length is 52 weeks. Forecast attrition for FY 1992/1993 is 20 percent, not including flight screening programs.

In addition, approximately 110 Air Force pilots will be trained annually in the EURO-NATO Joint Jet Pilot Training (ENJJPT) program. ENJJPT is a cooperative undergraduate pilot and pilot instructor training program that began operation on 1 October 1981 at Sheppard Air Force Base, Texas. It is the most significant project of its type that has been undertaken among Allies during peacetime. The nations involved in the program are Belgium, Canada, Denmark, Germany, Greece, Italy, Netherlands, Norway, Portugal, Turkey, United Kingdom and the United States. ENJJPT is based on the principles of proportionate sharing of program costs and proportionate instructor pilot manning. Forecast attrition for the program is 12 percent and the course length is 55 weeks.

Load data for both standard Air Force pilot training and ENJJPT are shown in Table VI-7.

TABLE VI-7. Training Input, Output, and Load, Air Force
Undergraduate Jet Pilot Training

<u>Service</u>	FY 90 FY 91			FY 92		FY 93		
Component	Load	Load	Input	Output	Load	<u>Input</u>	Output	Load
Active Reserve Natl Guard	1,579 56 <u>143</u>	1,144 47 148	938 75 <u>205</u>	870 50 <u>139</u>	841 58 <u>160</u>	625 94 <u>205</u>	750 60 <u>164</u>	640 72 172
Total	1,778	1,339	1,218	1,059	1,059	924	974	884

At the conclusion of Undergraduate Pilot Training, the new pilot is qualified in trainer aircraft but requires additional training in operational aircraft units and employment tactics.

Undergraduate Navigator Training

The Navy trains Navy and Marine Corps personnel to become Naval Flight Officers. The Air Force trains its personnel as navigators. The duties of Naval Flight Officers and Air Force navigators are not precisely the same because of mission differences but at the under graduate level they are sufficiently similar that they are referred to collectively in this report as "navigators" (the Army does not train or use navigators).

The Undergraduate Naval Flight Officer (NFO) training program is a building block training program. The training commences with Aviation Pre-flight Indoctrination (6 weeks for officers) or Aviation Officer Candidate School (14 weeks for officer candidates) where the student learns the aeronautical and physiological aspects of flight. After completing this phase, the student enters the Basic phase. This 15-week course provides the student with the basic skills and knowledge needed to safely navigate, communicate, manage aircraft systems, and to learn two-plane formation maneuvers. Successful completion of Basic qualifies students for entrance into Interservice Undergraduate Navigation Training (22 weeks) conducted at Mather AFB, California (described in a later paragraph), or the Navy Intermediate Phase. The Intermediate Phase (13 weeks) expands the knowledge gained in Basic and requires higher skill and performance standards. Practical flight skills are developed in the ID-23 Computerized Navigation/Communications Training Device; the 2B37 T-34C Simulator; the 2F101 T-2 Simulator; the T-2B aircraft for jet acclimatization and

high speed navigation; the T-47A aircraft for jet instrument navigation; and the T-34C aircraft for formation visual navigation, instrument navigation, and advanced performance maneuvers. After successful attainment of the performance standards, the students proceed to one of the following advanced specialized Naval Flight Officer Training phases: Radar Intercept Officer (RIO) (19 weeks), Tactical Navigation (TN) (15 weeks), Overwater Jet Navigation (OJN) (19 weeks), and Airborne Tactical Data Systems (ATDS) (15 weeks).

The advanced segment of Undergraduate Navigator Training for Naval Flight Officers destined for the multi-engine land base community is now managed by the Naval Air Training Unit (NAVAIRTU) at Mather AFB. Navigator candidates receive 320 hours of academic instruction, 78 hours of simulator training, and 80 hours of flight instruction in the T-43 aircraft during 23 weeks of training. This training provides sufficient skills and knowledge so that further training for the newly rated navigator can be limited to flight training in operational aircraft and training in employment of applicable weapons systems.

The Air Force program consists of a 14-week basic course that includes 266 hours of academic instruction, 35 hours of flight simulator training, 22 hours of actual flight instruction in the T-43 aircraft, and 2.5 hours in the T-37 aircraft. After the core course, students will attend one of three follow-on courses: Fighter, Attack, and Reconnaissance (FAR); Tanker, Transport, and Bomber (TTB); or Electronic Warfare Officer Training (EWOT). The FAR course provides 250 academic hours, 64 simulator hours, 14 T-37 hours, and 24 T-43 hours. The TTB trainee receives 300 academic hours, 68 simulator hours, and 88 T-43 hours. EWOT provides 431 academic hours, 63 simulator hours, and 28 T-43 hours.

After graduation, navigators require additional training in operational aircraft and employment techniques. Training load data for Undergraduate Navigator Training are shown in the following table.

TABLE VI-8. Training Input, Output, and Load, Undergraduate
Navigator Training

Service Component	FY 90 Load	FY 91 Load	Input	FY 92 Output	Load	Input	FY 93 Output	Load
<u>component</u>	Load	<u> </u>	mpat	Output	LVau	mpat	Output	LAMU
Navy Active	571	447	461	409	449	465	358	423
Marine Corps Active	58	48	49	40	45	47	40	43
Air Force					•			
Active	440	234	185	193	69	297	186	70
Reserve	2	4	24	24	9	19	21	7
Natl Guard	38	22	154	149	54	. 110	113	40
<u>DoD</u>							,	
Active	1,069	729	695	642	563	809	584	536
Res/Gd Tot	<u>40</u>	<u>26</u>	<u>178</u>	<u>173</u>	<u>63</u>	<u>129</u>	<u>134</u>	<u>47</u>
Total	1,109	755	873	815	626	938	718	583

Other Flight Training

This category covers miscellaneous types of flight training, including flight familiarization and other flight programs which were not previously included in undergraduate pilot or navigator training. Load data are displayed in Table VI-9.

TABLE VI-9. Training Input, Output, and Load
Other Flight Training

<u>Service</u>	FY 90	FY 91		FY 92			FY 93	
Component	Load	Load	Input	Output	Load	Input	Output	Load
Army								
Active	255	248	1,570	1,472	236	1,416	1,336	229
Reserve	17	21	190	138	21	189	137	20
Natl Guard	47	44	575	532	85	663	615	103
<u>Navy</u>								
Active	49	22	2,586	2,586	74	2,586	2,586	74
Air Force								
Active	358	271	1 200	1 222	105	1.540	1 400	225
			1,380	1,333	195	1,540	1,498	235
Reserve	2	1	11	11	2	105	99	6
Natl Guard	15	16	231	231	23	233	233	23
<u>DoD</u>								
Active	662	541	5,536	5,391	505	5,542	5,420	538
Res/Gd Tot	<u>81</u>	<u>82</u>	<u>1,007</u>	<u>912</u>	<u>131</u>	<u>1,190</u>	1,084	<u>152</u>
Total	743	623	6,543	6,303	636	6,732	6,504	690

The Army includes in this category courses for instructor pilots and specific pilot qualification courses in various aircraft. Most of the courses are short, in the range of two to seven weeks.

The Navy Other Flight Training workload is comprised mainly of instructor ground school training courses. Prospective instructors are taught unique techniques employed in the training of flight students. These courses are the Flight Instructor Training Course (FITC) and the Academic Instructor Training School (AITS). Jet transition training for designated aviators not qualified in jet aircraft is also included in this category, as are indoctrination flights for U. S. Naval Academy and NROTC midshipmen.

The Air Force conducts a separate 22-day flight screening program for candidates for Undergraduate Pilot Training who have not had previous flight familiarization training. Similar training is provided to most Air Force Academy and some ROTC cadets.

The Air Force Other Flight Training workload is limited largely to instructor courses for pilots and navigators and some specialized courses conducted by the Air Training Command

in such fields as electronic warfare. Most Air Force postgraduate flight training is conducted under operational command auspices.

In each of the Services, graduates of undergraduate pilot and undergraduate navigator training receive supplementary training in the specific aircraft they will be flying on operational missions. Emphasis is placed on crew training and performance under conditions that would be encountered in combat. In the Army most of this training is provided as part of normal unit training by the operational unit to which the new pilot is assigned. In the other Services, this additional training is provided by Navy or Marine fleet readiness squadrons, Marine combat crew readiness training squadrons, and Air Force combat crew training squadrons. As an exception, centrally conducted Army advanced flight training loads are included within Other Flight Training loads. However, most such training is classified as "crew and unit training" by the Navy, Marine Corps and Air Force and is not included in the loads of this report.

Determination of Requirements for Rated Officers

Flight Training rates are developed by comparing projections of future requirements for rated officers with projections of the future status of inventories of both Reserve and Active duty rated officers. Consideration is given to the need to have sufficient active duty aviators on hand, in appropriate grades. Requirements for rated officers include both the numbers needed to man the force in peacetime and the additional increment needed to sustain the force when war breaks out. For analytical purposes, aviator requirements are divided into two parts: unit and individuals. Requirements for aviators for each of these categories are computed to meet both peacetime needs and wartime mobilization needs.

<u>Unit</u> requirements represent the number of rated officers needed to carry out operational, training and management activities for programmed units. Each such authorized position (that is, military space or billet) requires a rated officer as an incumbent in order to carry out the functions of the job, either because the job involves flying duties (i.e., "operational flying" positions as defined for purposes of the Aviation Career Incentive Act of 1974) or requires flying experience. Other positions that may be occupied by rated officers for career broadening or similar purposes, but that do not require rated officer incumbents for accomplishing the duties, are not included. Unit requirements have three subcomponents: force, training, and supervision.

- Force requirements are the positions required to man and operate the Services' aircraft. The number of force positions is a product of established crew ratios or the number of crews per aircraft, which take into account workload (flying hour) and readiness factors and the amount of mission flying and unit flight training that is necessary.
- Training positions include the flyers who are conducting formal flight training.

The supervision component is made up of officer positions entailing actual supervision of flying and flight-related activities and the performance of staff jobs which require the expertise of a rated officer. These positions are continuously scrutinized by the services to assure that rated requirements are valid.

<u>Individual</u> requirements include the transients, students and other individuals needed to make it possible to provide for reasonable manning of positions in units.

Rated Officer Inventory Projections

Projecting rated officer inventories into the future must be based on historical experience, current judgment and an appraisal of how the officers will react to conditions in the future (for example: pay, morale, state of the civilian economy, civilian airline hiring plans and family satisfaction with service life). These estimates are projected for at least five years in the future. Comparisons of total force inventories of rated officers are then made against the computed total force requirements, and training rates for the entire five-year period are adjusted. This process is repeated each year so that adjustments can be made in training rates based on changes in requirements and/or updated inventory projections. This continuing process of adjustment is necessary to insure that the correct number of trained rated officers will be available in the future without large and expensive fluctuations in training rates.

Training Rate Adjustments

When a comparison of requirements and inventories discloses a shortage or overage of projected rated officers, training rates are adjusted upward or downward in order to bring the program back into balance. For example, if projected FY 1995 pilot requirements exceed projected inventories by 500, an increase in training rates (that is, output or production) of pilots of 100 per year starting in FY 1991 may be appropriate. Inputs into the training program would start in FY 1991 in order to obtain the first increase in desired output in FY 1992. This reevaluation process is repeated at least once each year, with adjustments made as necessary to avoid wide fluctuations in loads.

Determination of Training Loads

The process described above, through continuous updating of the comparison between projected rated officer requirements and inventories, leads to a requirement for phased output from the flight training establishment. The desired annual output, considering the anticipated attrition rates and the planned course lengths, as discussed in the preceding sections on the various types of flight training, establishes the size of the input necessary to achieve the target output. Training loads are then calculated using these factors to determine the average number of students to be on hand during the training year. For FY 1992 and FY 1993, the currently recommended loads are those displayed previously in this chapter.

VII

PROFESSIONAL DEVELOPMENT EDUCATION

General Description

The purpose of Professional Development Education is to provide training and education to career military personnel to prepare them to perform the increasingly complex responsibilities as they progress in their military careers. Where Specialized Skill Training is directed toward specific job skills, Professional Development Education is concerned with broader professional development goals in such subjects as leadership and management, military science, engineering and medicine. Professional Development Education is conducted at both military and civilian institutions. This category includes senior enlisted leadership training in recognition of the broad professional content of these courses, as opposed to the narrower skill-oriented training typical of most enlisted training programs. Most of the programs in this category are for professional development of the officers.

Education in the military is fundamental to the development of military officers, enabling them to become fully qualified to perform duties of high responsibility in both war and peace. In most non-military professions, growth in ability and knowledge is gained through experience. In the military, opportunities for full practice of the profession are limited to wartime, and even those officers with combat experience have not had the opportunity for thorough exercise of warfare decision skills at their current rank and responsibility. The military school system serves partially to fill this shortfall by educating military officers in the skills and knowledge needed to perform their duties in a variety of locales and situations, both in peacetime and wartime.

Training loads for FY 1987 through FY 1993 are as shown in Table VII-1. The total loads in the table show a considerable disparity among the Services in amounts of Professional Development Education. These disparities are more apparent than real, and are related mainly to somewhat different ways of categorizing Service education and training programs.

The first three subcategories of Professional Development Education are officer professional military development programs. These programs are at three levels: career, intermediate and senior. In addition to the regular courses for active force officers, most schools in this category present nonresident courses and short seminars. Large numbers of Reserve Component officers and other military students are provided instruction through correspondence courses.

Table VII-1. Professional Development Education Training Loads, FY 1987-1993

Service Component	<u>FY 87</u>	FY 88	FY 89	<u>FY 90</u>	<u>FY 91</u>	<u>FY 92</u>	<u>FY 93</u>
Army							
Active	3,410	3,767	3,904	3,475	2,760	3,267	3,527
Reserve	101	95	116	[*] 75	58	67	76
Natl Guard	66	59	82	85	67	80	88
<u>Navy</u>							
Active	2,060	2,195	2,119	2,270	2,266	2,305	2,327
Reserve	61	67	120	31	13	13	11
Marine Corps							
Active	847	917	929	1,002	1,187	2,137	2,115
Reserve	35	24	36	48	48	172	208
Air Force					•		
Active	3,904	3,602	3,332	3,349	3,290	3,347	3,371
Reserve	47	44	37	46	43	66	66
Natl Guard	46	49	44	41	43	63	63
DoD							
Active	10,221	10,481	10,284	10,096	9,503	11,056	11,340
Res/Gd Tot	<u>356</u>	338	435	<u>326</u>	<u>272</u>	461	<u>512</u>
Total	10,577	10,819	10,719	10,422	9,775	11,517	11,852

Professional Military Education is the systematic and comprehensive process of developing the skills, knowledge, and military judgement required to deal with the increasingly complex responsibilities associated with the duties and responsibilities of higher grades. In contrast to specific job or billet-related skills, PME is the life-long study of the profession of arms within the framework of military operations. PME is acquired through structured self-study, professional reading, symposia, formal schools attendance and experiences gained in duty assignments. The purpose of PME is to assist all Service members in fulfilling their personal goals and responsibilities for achieving operational competence.

Career Officer Professional Schools

The Marine Corps and Air Force conduct career officer professional courses for officers with some experience in operational units. These courses are Service-wide in scope and are, therefore, carried in this report under Professional Development Education. The Army and Navy conduct courses that are at a similar level, but are oriented toward specific skills (e.g., the Navy's Surface Warfare Officers Course) or somewhat broader skills within a specific part of the Service (e.g., the Army's Armor Officer Advanced Course). The Army and Navy courses, because of their specialization, are treated in this report as part of Specialized Skill Training.

The Marine Corps Amphibious Warfare School prepares captains for duties in battalion or squadron command or on regimental level staffs. The course length is 39 weeks. The Air Force Squadron Officer School is an 8-week course designed to prepare selected captains who have completed some active duty service for command and staff responsibilities.

The training load data associated with these Marine and Air Force courses are displayed in the Table VII-2.

TABLE VII-2. Training Input, Output, and Load, Career Officer
Professional Schools

Service	FY 91 FY 92					FY 93		
Component	Load	Load	Input	Output	Load	Input	Output	Load
Marine Corps								
Active	207	210	337	337	219	347	347	223
Reserve	8	8	220	220	8	221	221	9
Air Force								
Active	574	377	3,000	3,000	386	3,000	3,000	386
Reserve	2	4	30	30	4	30	30	4
Natl Guard	3	2	25	25	3	25	25	3
<u>DoD</u>								
Active	781	587	3,337	3,337	605	3,347	3,347	609
Res/Gd Total	<u>13</u>	<u>14</u>	275	<u>275</u>	<u>15</u>	<u>276</u>	<u>276</u>	<u>16</u>
Total	794	601	3,612	3,612	620	3,623	3,623	625

Intermediate Service Schools

Each of the Services maintains a Command and Staff College. In addition, the Navy is executive agent for the Armed Forces Staff College, a joint institution for students from all Services sponsored by the Joint Chiefs of Staff. While there are differences in approach and curriculum based on the requirements of the parent Service, each of the courses is designed to prepare officers for command and staff duties in all echelons of their parent Services and in joint or allied commands. A relatively small number of officers from each Service attends one of the Command and Staff Colleges of the other Services and a few attend Allied schools at the same level. Attendance at the Intermediate Service Schools is on a selective basis. The following table lists the Command and Staff Colleges and their respective course length in weeks.

TABLE VII-3. Intermediate Service Schools

<u>Schools</u>	Location	Course Length
Armed Forces Staff College	Norfolk, VA	12
Army Command and General Staff College	Fort Leavenworth, KA	42
College of Naval Command and Staff	Newport, RI	44
Marine Corps Command and Staff College	Quantico, VA	43
Air Command And Staff College	Montgomery, AL	43

Another school categorized as an Intermediate Service School for purposes of this report is the Defense Systems Management College at Fort Belvoir, Virginia. This is a joint school that conducts a primary 20-week course in program management concepts and methods with the major purpose of preparing selected military officers and DoD civilian personnel for assignments in program or project management.

Load data for military personnel attending Intermediate Service Schools is shown in the following table.

TABLE VII-4. Training Input, Output, and Load Intermediate Service Schools

<u>Service</u>	FY 90	FY 91		FY 92		 	FY 93	
Component	Load	Load	<u>Input</u>	Output	Load	Input	Output	Load
Army								
Active	209	35	127	127	110	127	127	107
Reserve	21	2	18	18	3	6	6	1 .
Natl Guard	26	3	2	2	2	3	3	3
Navy								
Active	194	141	1,246	1,246	192	1,246	1,246	202
Reserve	17	2	24	24	2	24	24	2
Marine Corps								
Active	165	142	296	296	229	296	296	229
Reserve	13	11	230	230	.9	230	230	9
Air Force								
Active	324	315	380	380	317	377	377	314
Reserve	12	12	94	94	13	94	94	13
Natl Guard	8	11	64	64	12	64	64	12
<u>DoD</u>								
Active	892	633	2,049	2,049	848	2,046	2,046	852
Res/Gd Total	<u>97</u>	<u>41</u>	432	<u>432</u>	41	421	421	<u>40</u>
Total	989	674	2,481	2,481	889	2,467	2,467	892

Senior Service Colleges

Each of the Services maintains a Senior Service School, or "War College." In addition, there is the National Defense University, consisting of two joint Senior Service Schools, The National War College and the Industrial College of the Armed Forces. Students from all four Services attend these colleges. Senior Service College attendance is highly selective and students are chosen by Service selection boards from among the most promising officers in the lieutenant colonel/colonel, commander/captain grades.

The common purpose of these Senior Service Colleges is to prepare students for senior command and staff positions at the highest levels in the national security establishment and the allied command structure. The unifying focus is the study of national goals and national security policy. Each of the Service colleges, while concentrating on the employment of the

parent Service in the defense mission, also includes the study of the employment of the forces of other Services.

All of the colleges integrate the study of economic, scientific, political, sociological and other factors into the consideration of national security problems. The Industrial College, in its approach to national security problems, emphasizes the use and management of national resources. The length of the principal courses at the Senior Service Colleges is 10 months. Most colleges also conduct shorter special-purpose seminar-type courses, some particularly designed for Reserve Component officers. Use of these short courses is greatest in the Navy.

Load data for the Senior Service Colleges are shown in the following table.

TABLE VII-5. Training Input, Output, and Load
Senior Service Colleges

Service	FY 90	<u>FY 91</u>		FY 92			FY 93	
Component	Load	Load	<u>Input</u>	Output	Load	<u>Input</u>	Output	<u>Load</u>
Army								
Active	359	279	1,435	1,433	342	1,465	1,463	362
Reserve	33	24	485	483	42	538	537	42
Natl Guard	22	18	283	282	28	383	382	33
<u>Navy</u>								
Active	148	114	552	552	124	552	552	134
Reserve	10	7	28	28	7	28	28	7
Marine Corps								
Active	58	21	60	60	21	60	60	21
Reserve	5	5	60	60	1	60	60	1
		-		00	•	00	00	1
Air Force								
Active	126	129	155	155	131	153	153	129
Reserve	6	4	26	26	5	25	25	5
Natl Guard	6	5	25	25	5	26	26	5
<u>DoD</u>								
Active	691	543	2,202	2,200	618	2,230	2,228	646
Res/Gd Total	<u>82</u>	<u>63</u>	<u>907</u>	<u>904</u>	88	1,060	1,058	<u>93</u>
			-					
Total	773	606	3,109	3,104	706	3,290	3,286	739

Enlisted Leadership Training

The courses included in this category are designed to provide selected senior enlisted personnel the skills and knowledge needed to assume the responsibilities of the highest noncommissioned officer grades. These courses are the culmination of formal enlisted training and are, for enlisted personnel, analogous to the officer courses discussed in the preceding sections. In addition to such subjects as methods of leadership, human relations, discipline and training, and the administration and employment of military organizations, these higher level schools provide senior non-commissioned officers a broader perspective of the role and functions of their Services. Schools, locations and course length in weeks are shown in Table VII-6.

TABLE VII-6. Enlisted Leadership Training Courses

Schools	Location	Course Length
Army: Sergeants Major Academy	Fort Bliss, TX	22
Navy: Senior Enlisted Academy	Newport, RI	9
Marine Corps: Sr Level (SgtMaj/Staff		
MGySgt Sr Course)	Quantico, VA	1
Staff NCO Academy (Career Course)	Quantico, VA	6
, in the second	Camp Lejeune, NC	6
	El Toro, CA	6
(Advanced Course)	Quantico, VA	10
Air Force:		
AF Senior NCO Academy	Gunter AFB, AL	7
Airman Leadership School	106 Worldwide	4
NCO Academy	18 Worldwide	6

Other enlisted leadership training for more junior noncommissioned officers is carried in Specialized Skill Training. This includes command sponsored NCO academies, for example. This training tends to be more skill related for specific types of specialized leadership responsibilities. The senior enlisted leadership training carried in this chapter is more properly thought of as Professional Development Education in a broader sense. All four Military Services now sponsor Senior Enlisted Leadership Academies. In addition the Air National Guard conducts Professional Military Education courses at McGhee-Tyson Air

Base, Knoxville, TN. These courses include Leadership School, NCO Academy, Academy of Military Science and Professional Continuing Education. Army National Guard NCO's are trained in the Reserve Component Noncommissioned Officers Education System (RCNCOES), attending courses at the appropriate level of training at State Military Academies or National Guard Bureau Regional NCO Schools.

Training loads for enlisted leadership training are shown in Table VII-7.

TABLE VII-7. Training Input, Output, and Load Enlisted Leadership Training

Service Component	FY 90 Load	FY 91 Load	Input	FY 92 Output	Load	Input	FY 93 Output	Load
Army								
Active	351	332	1,122	1,114	372	1,076	1,069	352
Reserve	21	32	152	151	22	146	145	24
Natl Guard	37	46	274	272	50	300	299	52
Navy								
Active	48	42	265	261	47	265	261	47
Reserve	2	2	10	10	2	10	10	2
Marine Corps								
Active	278	301	9,228	9,228	1,094	9,228	9,228	1,094
Reserve	22	24	1,596	1,596	154	1,864	1,864	189
Air Force								
Active	193	211	1,824	1,824	250	1,824	1,824	250
Reserve	5	5	36	36	5	36	36	5
Natl Guard	6	11	72	72	10	72	72	10
DoD								
Active	870	886	12,439	12,427	1,763	12,393	12,382	1,743
Res/Gd Tot	<u>93</u>	<u>120</u>	2,140	2,137	243	<u>2,428</u>	2,426	<u>282</u>
Total	963	1,006	14,579	14,564	2,006	14,821	14,808	2,025

Graduate Education Fully Funded, Full Time

The Department of Defense needs military officers with specialized advanced knowledge which, in some cases, is attainable only through graduate education. Under the program established by Section 2004 of Title 10 United States Code and described in this section, military officers pursue graduate education on a fully funded, full-time basis. A minimum service payback obligation of three years for the first year of schooling and one year for each year after the first is required of all officers entering the program. Services establish maximum pay back period.

The following table displays training load data for these graduate education programs. All participants are members of the Active Forces.

TABLE VII-8. Training Input, Output, and Load Graduate Education, Fully Funded, Full Time

Service FY 90 FY 91				FY 92		FY 93			
Component	Load	Load	Input	Output	Load	Input	Output	Load	
Army	952	924	585	455	893	624	504	972	
Navy	1,404	1,492	764	822	1,465	765	769	1,440	
Marine Corps	163	148	81	85	155	78	75	145	
Air Force	<u>1,075</u>	<u>1,084</u>	<u>783</u>	<u>660</u>	<u>1,161</u>	<u>785</u>	<u>725</u>	<u>1,216</u>	
Total	3,594	3,648	2,213	2,022	3,674	2,252	2,073	3,773	

Officer graduate students attend either a civilian educational institution or one of the two Service institutions, the Naval Postgraduate School or the Air Force Institute of Technology, depending upon where the required education can best be obtained. Curricula in the two Service institutions emphasize military unique courses, such as in logistics management or intelligence operations, and military applications in all other courses. While these schools are primarily used by the parent Services (including Marine Corps use of the Naval Postgraduate School), they also educate some students from other Services. The following table displays student loads for these two schools.

TABLE VII-9. Graduate Education Load at Service Institutions

	Act	uals	Estir	nates
	FY 1990	FY 1991	FY 1991	FY 1993
Naval Postgraduate School				
Army	144	150	160	180
Navy	1,185	1,266	1,240	1,215
Marine Corps	129	125	123	124
Air Force	<u>65</u>	<u>65</u>	<u>67</u>	69
Total	1,523	1,606	1,590	1,588
Air Force Institute of Technology				
Army	22	35	35	35
Navy	1	1	2	2
Marine Corps	1	1	1	2
Air Force	<u>1,075</u>	1,084	1,161	1,216
Total	1,099	1,121	1,199	1,255

Requirements for graduate-degreed officers depend upon the number of "validated billets," that is, military positions that have been determined to require an incumbent with graduate level education in the applicable academic discipline. The Services examine the duty prerequisites for each billet nominated for validation and determines if the job does, in fact, require an officer with an advanced degree. Requirements for graduate legal education are determined separately.

Other Full Time Education Programs

In addition to the Professional Development Education programs already described there are a variety of other full-time programs tailored to meet the particular needs of the Services. (Health Professions Education programs are discussed in a separate section at the end of this chapter).

Several programs have been designed to permit selected individuals an opportunity to work toward associate, baccalaureate or advanced degrees. These programs benefit the Services in several important ways: they increase the technical qualifications of the individuals in the program; they improve the general educational levels of Service personnel; and they provide career retention and recruiting incentives to outstanding personnel. In addition, to the extent possible, personnel in advanced education programs are later used to satisfy validated requirements and hence reduce the required student load in graduate education for validated billets.

The degree completion programs are managed by the individual Military Departments and each has its own selection criteria. Generally, individuals are not selected for a program unless the education will enhance their professional development and be of use to the Military Department. All of the programs require an active Service payback from the individual.

Short course education provides the Military Services with needed skills in a wide variety of scientific, administrative and other fields. These programs are selected to train personnel in job-oriented skills that can best be acquired through abbreviated courses. Accounting, traffic management and aviation safety are examples of skills involved. Some of this training is conducted in DoD schools and at civilian institutions.

TABLE VII-10. Training Input, Output, and Load
Other Full Time Education Programs

<u>Service</u>	<u>FY 90</u>	FY 91		FY 92			FY 93	
Component	Load	Load	Input	Output	Load	Input	Output	Load
Army Active	414	304	1,188	1,188	350	1,236	1,236	393
<u>Navy</u>								
Active	149	149	1,259	1,258	151	1,318	1,256	178
Reserve	2	2	49	49	2	0	0	0
Marine Corps								
Active	131	365	269	229	419	242	253	403
Air Force								
Active	461	493	8,884	8,893	501	8,884	8,891	499
Reserve	21	18	916	916	39	916	916	39
Natl Guard	18	14	738	738	33	738	738	33
<u>DoD</u>								
Active	1,155	1,311	11,600	11,568	1,421	11,680	11,636	1,473
Res/Gd Tot	41	<u>34</u>	<u>1,703</u>	<u>1,703</u>	<u>74</u>	<u>1,654</u>	<u>1,654</u>	72
Total	1,196	1,345	13,303	13,271	1,495	13,334	13,290	1,545

Health Professions Education

This subcategory is made up of a wide variety of courses for personnel of all health professions; physicians, dentists, nurses, medical administrators, and so forth. The majority of the courses offered are conducted in military facilities and vary in length from a few days to a full year. Some training is conducted at civilian medical institutions and, in the case of the Army, includes some advanced degree programs. The purpose of Health Professions Education is to expand the skills of military medical personnel and to provide them timely information on the latest techniques in their fields. In this category, the Army and Navy provide long-term training. The Air Force relies on short courses. Educational programs connected with the acquisition of health professionals is carried in this report under Officer Acquisition Training. The following table shows load data for Health Professions Education Programs.

TABLE VII-11. Training Input, Output, and Load
Health Professions Education

<u>Service</u>	FY 90	<u>FY 91</u>		FY 92			FY 93		
Component	Load	Load	<u>Input</u>	Output	Load	Input	Output	Load	
Army	1,190	886	859	859	1,200	936	936	1,350	
Navy	327	328	258	310	326	231	297	326	
•					020	201	271	320	
Air Force	<u>596</u>	<u>681</u>	<u>2,201</u>	<u>2,195</u>	<u>601</u>	<u>2,201</u>	<u>2,172</u>	<u>577</u>	
Total	2,113	1,895	3,318	3,364	2,127	3,368	3,405	2,253	

VIII

TRAINING MANPOWER

General Description

Manpower associated with the individual training mission in the Department of Defense can be divided into two parts: first, the trainees and students being trained, and second, the military and civilian manpower that conducts and supports the training. These two classes of manpower are discussed and explained in this chapter.

Trainees and Students

Manpower undergoing training in the Defense training establishment is defined and quantified in three different ways, each of which serves a somewhat different purpose with regard to manpower accounting and resource allocation.

l. Training Loads. These are the "military training student loads" and are detailed in Chapters III through VII of this report. They represent the average number of military trainees, students and cadets of each Service and component in training during a given fiscal year and are subject to annual congressional authorization. Training loads include all military manpower of a given Service or component who are undergoing individual training in a centralized school or training center, regardless of whether the training is conducted by the parent Service, one of the other Services, a DoD school, or by an agency or institution outside the Department of Defense, such as a civilian college or university. Training loads also include all military personnel in training regardless of their assignment status. Some trainees and students are assigned in a Permanent Change of Station (PCS) status to the training activity. Others are attending training in a temporary duty (TDY) or temporary additional duty (TAD) status while remaining assigned to their parent units. Still others are attending while in transit from one permanent assignment to another.

Since training loads are an annual average and most courses are much shorter than a year in length, the actual number of students and trainees who enter training, and the number who graduate, is considerably greater than the training load. For example, the total programmed training load for Recruit Training in FY 1993 is about 39,436, yet about 243,000 persons are to enter Recruit Training and about 225,000 are to graduate.

2. <u>Training Workloads</u>. The total number of trainees and students undergoing training within DoD includes some trainees and students of foreign nations, DoD civilian employees, and members of other departments and agencies of the U.S. Government, notably the Coast Guard. In addition, many U.S. military students and trainees are trained by a Service other than their own. Consequently, the average number of students being trained by a given Service, or its <u>training workload</u>, usually differs from its training load. For example, the

Marine Corps has a programmed Flight Training load of 573 in FY 1993. However, since the training is conducted by other Services, its Flight Training workload is zero. On the other hand, because the Navy trains many personnel from other Services and Coast Guard, foreign students as well as most of its own students, the Navy's Specialized Skill Training workload is higher than its training load.

Training workload, in conjunction with other applicable considerations, is the major determinant of the resources (manpower, funds, material and facilities) required to conduct training. It, rather than training load, is appropriately used in considering the allocation of resources to a Service or a training activity. Table VIII-1 displays the programmed training workloads for each of the Services in FY 1992 and 1993.

TABLE VIII-1. Training Workloads (Thousands)

FY 1992		(IIIOUS	unus)		
Category	Army	Navy	Marine Corps	Air Force	<u>DoD</u>
Recruit	15.1	10.5	8.4	5.7	39.7
Off Acquisition	5.1	4.7	.4	4.7	14.9
Specialized Skill	57.1	33.2	8.1	17.6	116.0
Flight	1.3	2.3	0.0	1.9	5.5
Professional Dev					
Education	1.9	2.8	1.7	2.9	9.3
One-Station Unit					- 10
Training	9.3	0.0	0.0	0.0	9.3
Defense Agencies	0.0	0.0	0.0	0.0	4.8
Ü					
Total	89.8	53.5	18.6	32.8	199.5
FY 1993		·			
Category	Army	Navy	Marine Corps	Air Force	<u>DoD</u>
Recruit	13.9	11.1	8.7	5.7	39.4
Off Acquisition	5.1	4.7	.3	5.0	15.2
Specialized Skill	53.9	30.4	8.1	17.8	110.2
Flight	1.4	2.3	.0	1.7	5.4
Professional Dev					
Education	1.9	2.8	1.7	3.0	9.3
One-Station Unit					
Training	9.3	0.0	0.0	0.0	9.3
Defense Agencies	0.0	0.0	0.0	0.0	4.7
Total	85.5	51.3	18.8	33.2	193.5

- 3. Students, Trainees, and Cadets. In the Individuals accounts of the Defense Manpower Requirements Report, military manpower is included for each Service as "Trainees and Students" and (except for the Marine Corps) "Cadets". Conceptually, this manpower represents the number of military trainees, students, cadets and midshipmen programmed to be assigned (PCS as opposed to TDY/TAD) for training on the last day of a given fiscal year. Student, trainee and cadet manpower is similar to training load in that both represent military members of the reporting Service in training status. Nevertheless, there are substantial differences in the way the amount of manpower in these two manpower aggregations is calculated, with the result that the totals are seldom the same. The major reasons for these differences are:
- Training loads are man-years in training status, whereas trainees, students, and cadets are end strengths, or numbers in training on the last day of the fiscal year. Trainee, student, and cadet numbers are thus affected by the seasonality of enlistment patterns, as described in Chapter III, while the element of seasonality is leveled out in training loads.
- Training loads include students attending training in a temporary duty (TDY or TAD) status as well as those attending en route training in a PCS status. In the Defense Manpower Requirements Report, TDY and TAD students are carried in the categories of their parent units.

Training loads are a more accurate measure of the amount of training that is needed to meet military requirements than are the categorizations trainees, students and cadets.

Manpower in Support of Training

Military and civilian manpower is required to accomplish the individual training mission. This manpower performs all the other tasks necessary to conduct and support individual training conducted in training institutions; i.e., it conducts and supports instruction, operates training bases and facilities, maintains training equipment, produces training aids, provides personal and community services to students, trainees, and other military members, plans and manages training.

ROTC students are not military members in an active duty status and are not included in military manpower training loads. However, ROTC Basic Camp loads are included in the Army Recruit training loads because recruit training instructors and staff support and conduct that training. To be consistent with this treatment of ROTC students, manpower supporting the primary ROTC programs at colleges and universities is not included in Tables VIII-2 through VIII-5.

The following tables summarize manpower in support of training in three general functions: Conduct of Individual Training, Training Base Operating Support, and Management Headquarters. Conduct of Individual Training includes the following types of manpower:

instructors, instructional support, school/training center staffs, student supervisors and direct training support such as training aids and literature, audiovisual resources and instructional systems development.

TABLE VIII-2. DoD Manpower in Support of Training,
Conduct of Individual Training
(End Strengths, Thousands)

	FY 89	FY 90	FY 91	FY92	FY 93	
	Mil Civ					
Army	38.2 12.4	37.4 11.4	37.0 10.4	34.6 10.0	31.8 9.6	
Navy	28.2 3.3	28.8 3.3	24.6 3.9	26.2 3.8	25.7 3.7	
Marine Corps	9.5 0.3	11.0 0.3	9.5 0.3	9.1 0.3	8.9 0.3	
Air Force	<u>13.4</u> <u>5.0</u>	<u>16.2</u> <u>5.5</u>	<u>14.0</u> <u>4.3</u>	<u>13.5</u> <u>4.4</u>	<u>13.4</u> <u>4.8</u>	
Total	89.2 21.0	93.3 20.5	85.2 18.9	83.4 18.5	79.7 18.4	

TABLE VIII-3. DoD Manpower in Support of Training. Base Operating Support (End Strengths, Thousands)

	<u>FY 89</u>	FY 90	FY 91	FY92	FY 93	
	Mil Civ	Mil Civ	Mil Civ	Mil Civ	Mil Civ	
Army	7.4 19.4	7.3 17.5	7.8 17.5	6.2 13.9	6.3 13.3	
Navy	6.8 7.0	6.8 6.0	6.3 6.5	5.2 5.1	5.1 4.5	
Marine Corps	3.5 1.8	2.9 1.7	2.8 1.5	2.8 0.9	2.6 0.8	
Air Force	<u>10.9</u> <u>8.8</u>	<u>8.8</u> <u>6.2</u>	<u>9.3</u> <u>7.0</u>	<u>7.2</u> <u>4.5</u>	<u>5.5</u> <u>4.2</u>	
DoD Total	28.6 37.0	25.7 31.4	26.3 32.6	21.4 24.4	19.5 22.8	

TABLE VIII-4. DoD Manpower in Support of Training, Management

Training Management Headquarters

(End Strengths, Thousands)

	<u>FY</u> <u>Mil</u>	<u> 89</u> <u>Civ</u>	FY <u>Mil</u>	<u>7 90</u> <u>Civ</u>	<u>FY</u> <u>Mil</u>	<u>7 91</u> <u>Civ</u>	<u>FY</u> <u>Mil</u>	<u>792</u> <u>Civ</u>	<u>FY</u> <u>Mil</u>	7 93 <u>Civ</u>
Army	0.5	0.8	0.5	0.7	0.5	0.7	0.5	0.7	0.4	0.8
Navy	0.3	0.2	0.3	0.3	0.2	0.3	0.2	0.3	0.2	0.3
Marine Corps	0.0	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Force	0.8	0.4	0.7	0.4	0.6	0.4	0.7	0.5	0.6	0.4
Total	1.5	1.4	1.5	1.4	1.3	1.4	1.4	1.5	1.3	1.5

<u>TABLE VIII-5. DoD Manpower in Support of Training, All Functions</u> (End Strengths, Thousands)

	<u>FY</u> <u>Mil</u>	<u>7 89</u> <u>Civ</u>	<u>FY</u> <u>Mil</u>	<u>7 90</u> <u>Civ</u>	<u>FY</u> <u>Mil</u>	<u>7 91</u> <u>Civ</u>		<u>Y92</u> <u>Civ</u>	<u>FY</u> <u>Mil</u>	<u>7 93</u> <u>Civ</u>
Army	46.1	32.7	45.1	29.6	45.2	28.5	41.3	24.7	38.5	23.7
Navy	35.3	10.4	35.8	9.6	31.2	10.7	31.6	9.1	31.0	8.4
Marine Corps	12.9	2.1	13.9	1.9	12.4	1.8	11.9	1.2	11.5	1.1
Air Force	25.1	14.1	25.7	12.1	24.0	11.8	21.4	9.4	19.6	9.5
Total	119.4	59.3	120.5	53.3	112.8	52.8	106.2	44.4	100.6	42.6

The Services' estimates of training attributable manpower include some staff and support manpower that do not contribute to the production of student output and loads. This manpower is reported as training resources in the Future Years Defense Program (FYDP) because they belong to organizations and units with a primary mission of training. The majority of the non-training attributable manpower is that portion of Base Operating Support (BOS) needed to support non-training tenant activities at training installations.

^{*} Less than 50 personnel.

Table VIII-6 shows changes in total military and civilian manpower in support of training between FY 1980 and FY 1993.

TABLE VIII-6. Trends, Manpower in Support of Training,

DoD Total, By General Function

(End Strengths, Thousands)

	•	FY 8 Civ	0 <u>TOT</u>	-	FY 92 <u>Civ</u>	<u>TOT</u>	<u>F</u> <u>Mil</u>	Y 93 Civ	<u>TOT</u>	Total M	Change anpower: FY 92-93
Conduct of Individual										11 00-72	1 1 72-93
Training	90	22	112	84	18	102	80	18	98	- 8.9%	- 3.9%
Base Oper Support	32	39	71	21	25	46	19	23	42	-35.2%	- 8.7%
Management Headqtrs	2	2	4	1	2	3	1	2	3	-25.0%	-
Total	124	63	187	106	45	151	100	43	143	- 19.3%	- 5.3%

As Table VIII-6 shows, the total military and civilian manpower in support of training has decreased 19.3 percent between FY 1980 and FY 1992 and 5.3 percent from FY 1992 to FY 1993. The decrease occurred in all areas supporting training.

As shown in Tables VIII-7 and VIII-8, training workloads will be 17.2 percent lower in FY 1992 than in FY 1980 and 3.0 percent lower in FY 1992 to FY 1993. When considered with the decrease in the level of total manpower in support of training, this implies an increase in productivity and improved training efficiency.

TABLE VIII-7. Training Workload Trends (Thousands)

•				Percent Change		
	<u>FY 80</u>	FY 92	FY 93	FY 80-92	FY 92-93	
Army	105	90	86	-14.3%	- 4.4%	
Navy	70	53	51	-24.3%	- 3.8%	
Marine Corps	18	19	19	+ 5.5%	-	
Air Force	47	33	33	-29.9%	-	
Defense Agencies		5	5	•	-	
Total	239	200	194	-16.3%	- 3.0%	

TABLE VIII-8. Trends, Training Manpower and Training (Thousands)

	FY 80	FY 92	FY 93	Percent FY 80-92	<u>Change</u> <u>FY 92-93</u>
Manpower in Support of Training	187	151	143	-19.3%	-5.3%
Training Workloads	239	200	194	-16.3%	-3.0%

Training Manpower Detailed by Service and Type of Training

Table VIII-9 shows the manpower required to support FY 1992 and FY 1993 training workloads by Service and training activity.

As was noted early in this chapter, training workloads, in conjunction with other factors, are the determinants of the resources required to conduct training. The workload/resource relationship is not a simple one, but depends upon the nature of training and training support involved. For example, Flight Training normally requires a great deal of support manpower for aircraft maintenance and weapons training requires close instructor supervision for safety considerations.

TABLE VIII-9. Training Manpower by Service and Type of Training (Thousands)

F	<i>l</i> 1	9	92

<u>FY 1992</u>										
					M	arine	A	\ir		
	<u>A</u>	rmy	<u>Na</u>	avy	<u>C</u> c	orps	Fo	orce]	<u>DoD</u>
	<u>Mil</u>	Civ	<u>Mil</u>	<u>Civ</u>	<u>Mil</u>	Civ	<u>Mil</u>	Civ	Mil	Civ
Recruit	2.9	0.1	1.3	*	2.3	*	0.5	*	7.0	0.1
Off Acquisition	0.7	0.8	0.8	0.9	0.3	*	1.1	0.7	2.9	2.4
Specialized Skill	16.2	4.3	18.3	0.8	5.4	0.2	6.8	1.8	46.6	7.1
Flight	1.1	0.3	5.0	0.4	0.9	0.0	3.1	0.8	10.0	1.5
Professional	0.7	0.8	0.5	8.0	0.3	0.1	1.1	0.5	2.6	2.2
OSUT	4.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.2
Medical Trng	0.2	0.0	0.3	0.6	*	0.0	0.3	0.0	0.7	0.6
Direct Trng Spt	8.5	3.5	0.1	0.2	*	*	0.7	0.6	9.3	4.4
Trng Base Spt	6.2	13.9	5.2	5.1	2.8	0.9	7.2	4.5	21.4	24.4
Trng Mgmt HQ	0.5	0.7	0.2	0.3	*	0.0	0.7	0.5	1.4	1.5
Total <u>a</u> /	41.3	24.7	31.6	9.1	11.9	1.2	21.4	9.4	106.2	44.4
FY 1993										
<u>FT 1993</u>					M	arine	٨	ir		
	Δ	rmy	<u>Na</u>	17.77		orps	_		т	7°D
	_	<u>Civ</u>	Mil	<u>Civ</u>	Mil	<u>Civ</u>	Mil	Civ	_	<u>DoD</u>
	14111	CIV	14111	CIV	IVIII	CIV	14111	<u>Civ</u>	<u>Mil</u>	<u>Civ</u>
Recruit	2.9	0.1	1.2	*	2.3	*	0.5	*	6.8	0.1
Off Acquisition	0.7	0.8	0.8	0.8	0.2	*	1.1	0.7	2.9	2.3
Specialized Skill	14.6	4.2	17.9	0.8	5.2	0.2	6.8	2.1	44.5	7.2
Flight	1.0	0.3	4.9	0.4	0.9	0.0	2.9	0.8	9.8	1.5
Professional	0.7	0.8	0.5	0.8	0.3	0.1	1.1	0.6	2.5	2.3
OSUT	4.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.2
Medical Trng	0.2	0.0	0.3	0.6	*	0.0	0.3	0.0	0.8	0.7
Direct Trng Spt	7.7	3.3	0.1	0.2	*	*	0.7	0.6	8.4	4.1
Trng Base Spt	6.3	13.3	5.1	4.5	2.6	0.8	5.5	4.2		22.8
Trng Mgmt HQ	0.4	0.8	0.2	0.3	*	0.0	0.6	0.4	1.3	1.5
Total <u>a</u> /	38.5	23.7	31.0	8.4	11.5	1.1	19.6	9.5	100.6	126

a/ The Service estimates of training attributable manpower include some staff and support manpower that does not contribute directly to the production of student output and loads but are reported as training resources in the Future Years Defense Program (FYDP) because they belong to larger organizations with a primary training mission. *Less than 50 personnel.

Manpower data in the six categories of training (i.e., Recruit through One-Station Unit Training) includes instructors, school/training center staffs and student supervisors. Direct training support includes such tasks as training aids and literature, audiovisual resources, and instructional systems development.

IX

TRAINING MANAGEMENT AND FUNDING

General Description

Chapters III through VII of this report describe and explain the military training student loads requested for each military component. These student loads represent patterns and levels of training effort which require manpower and other resources. The purpose of this chapter is to describe and explain the resources (other than manpower, which is discussed in Chapter VIII), funding and costs associated with the conduct of individual training.

In considering training resources, it is important to distinguish between the training <u>loads</u> required by a Service but conducted in part outside the Service, and the <u>workloads</u> representing training conducted by the Service. As discussed in the previous chapter, the workloads, which represent training conducted by a Service, are the basis for resource requirements (manpower, material, facilities and funds) needed to conduct and support the training that the Service executes.

Management of Individual Training

Detailed management of individual training is carried out by the four Military Services. Each of the Services, except the Marine Corps, has a training commander immediately subordinate to the Service chief who is responsible for most of the individual training conducted within that Service. Some training is managed directly by the Service headquarters. However, the most prevalent pattern of control is through a training command headquarters that manages most Service military schools, training centers and other training facilities.

Staff Responsibilities

Within the Office of the Secretary of Defense (OSD), staff responsibility for individual training and education policies rests with the Assistant Secretary of Defense (Force Management and Personnel), with a strong influence over the allocation and use of resources being exercised by the Assistant Secretary of Defense (Comptroller). These two offices work closely together in the staff supervision of DoD individual training and education. Other OSD offices, such as Health Affairs, Reserve Affairs, and Command, Control, Communications and Intelligence (C3I), participate as appropriate. The OSD role is generally one of policy formulation, allocation of resources, overview of Service training programs and coordination among the Services.

Within each Service headquarters, with exception of the Marine Corps, a principal staff officer has responsibility for individual training. Other staff members may have primary responsibility for certain types of training, for example, a Service Surgeon General for professional medical training. Other staff members have collateral responsibilities for the allocation of manpower and funds to the training function.

Primary responsibility on the Army staff for individual training rests with the Deputy Chief of Staff for Operations and Plans and his subordinate, the Director of Training. Within the Navy, the principal staff officer is the Deputy Chief of Naval Operations for Manpower, Personnel, and Training. The Deputy Commander for Training and Education acts as the principal training advisor to the Commandant of Marine Corps, through the Commanding General, Marine Corps Combat Development Command (MCCDC). Within the Air Force, the Director of Personnel Programs, under the Deputy Chief of Staff for Personnel, has staff responsibility for individual training.

Training Commands

Each Service has a command headquarters that manages most of the individual training conducted by that Service.

The Army's principal training command is Headquarters, Training and Doctrine Command (TRADOC), located at Fort Monroe, Virginia. TRADOC's control is exercised through training installations and school commanders throughout the United States.

The Chief of Naval Education and Training (CNET), headquartered at Pensacola, Florida, exercises control, through subordinate functional commanders, of education and training conducted in training centers, schools, and programs throughout the Navy.

For the Air Force, Headquarters, Air Training Command (ATC), at Randolph Air Force Base, Texas, directly controls individual training centers and units.

For the Marine Corps, the Deputy Commander for Training and Education, Quantico, Virginia, also functions as the Commander, Marine Corps Schools and exercises command, operational control, technical direction, and/or coordination for all Marine Corps formal schools and training centers.

The Service-wide training commands are not responsible for all individual training and education conducted. As already noted, the Surgeons General are responsible for most health professional and medical technical training. Other examples include the Service Academies, which are under the direct supervision of the respective Service Chiefs.

The Services' training command commanders and the Marine Corps Deputy Commander for Education and Training are also the senior members of the Interservice Training Review Organization (ITRO). The ITRO was formed in 1972 to facilitate cooperative training

efforts among the Services. The committees and working groups of the organization perform the detailed analysis which becomes the basis for decisions on the feasibility of consolidation of training courses or other cooperative arrangements. A listing of major joint training efforts is provided in Appendix B.

Training Facilities

Appendix C lists the principal individual training facilities of the four Services for each of the major categories of training. Projected average training workloads and training support manpower for FY 1992 and FY 1993 are also shown for each facility listed.

Training Funding and Costs

The training costs addressed in this section include funding in the President's Budget for FY 1992 and FY 1993 requested for individual military training and education. Depreciation costs of training facilities and equipment are not included, although training investment costs estimated for FY 1992 and FY 1993, such as procurement and construction costs, are included. The report uses the data in the DoD's Future Year Defense Program (FYDP) as the basis for all estimates of the manpower and funds devoted to training and education.

The costs in this chapter include funding for military pay and allowances for assigned trainees and students, pay and allowances of military and civilian personnel in support of training, base operating costs, training related activities, training investment costs for construction and procurement, and overhead costs for training administration and command. Certain costs for activities at training installations support non-training missions (such as base operating support for non-training activities on training bases). These non-training costs are embedded in Program 8 and, therefore, are included in the costs shown in the tables in this chapter.

For a given Service, the requirement for funding for training arises from two factors. First is the need to fund the pay and allowances of its own military training student loads, regardless of where or by whom the students are trained. Second, the need to provide for the level of individual training and education effort necessary to meet the Service's commitments to accomplish training for its own and other students.

For comparability, the funding requests associated with ROTC and other non-load training programs are deleted from the following tables. Hence, the tables report FY 1992 and FY 1993 funding estimates that relate to the requested FY 1992 and FY 1993 training loads.

Special caution should be exercised in using these costs for comparisons among Services. Differences in missions among the Services, differing operating and training conditions, and differences in the mix of Service training programs degrade the soundness of comparisons based on aggregated data such as these.

Table IX-1 shows Army funding for individual training by category.

TABLE IX-1. Army Funding of Individual Training a/
(\$ Millions)

FY 89	<u>FY 90</u>	FY 91	<u>FY 92</u>	FY 93
448.6	357.4	292.2	309.1	326.7
126.4	130.1	141.3	138.9	143.1
1,608.4	1,488.6	1,505.5	1,502.1	1,459.5
337.2	349.5	345.1	480.8	468.5
165.5	271.0	310.1	309.0	275.4
430.4	337.5	313.0	307.5	312.8
57.8	79.2	69.6	35.2	36.6
0.0	0.0	0.0	0.4	72.4
589.7	565.4	623.8	582.5	556.6
70.1	61.1	68.4	56.3	49.5
1,551.1	1,514.1	1.801.2		1,121.5
602.5	706.2	<u>543.5</u>	635.8	588.5
5,987.7	5,860.1	6,013.7	5,659.8	5,411.1
	448.6 126.4 1,608.4 337.2 165.5 430.4 57.8 0.0 589.7 70.1 1,551.1 602.5	448.6 357.4 126.4 130.1 1,608.4 1,488.6 337.2 349.5 165.5 271.0 430.4 337.5 57.8 79.2 0.0 0.0 589.7 565.4 70.1 61.1 1,551.1 1,514.1 602.5 706.2	448.6 357.4 292.2 126.4 130.1 141.3 1,608.4 1,488.6 1,505.5 337.2 349.5 345.1 165.5 271.0 310.1 430.4 337.5 313.0 57.8 79.2 69.6 0.0 0.0 0.0 589.7 565.4 623.8 70.1 61.1 68.4 1,551.1 1,514.1 1,801.2 602.5 706.2 543.5	448.6 357.4 292.2 309.1 126.4 130.1 141.3 138.9 1,608.4 1,488.6 1,505.5 1,502.1 337.2 349.5 345.1 480.8 165.5 271.0 310.1 309.0 430.4 337.5 313.0 307.5 57.8 79.2 69.6 35.2 0.0 0.0 0.0 0.4 589.7 565.4 623.8 582.5 70.1 61.1 68.4 56.3 1,551.1 1,514.1 1,801.2 1,302.2 602.5 706.2 543.5 635.8

a/ May not add to totals due to rounding.

Funding for individual training is shown each year in Program 8 of the FYDP. A portion of the resources under Program 8 are not directly related to individual training. The Services sometimes include costs in Program 8 which support other training and activities in addition to individual institutional training. These costs are related to audiovisual support, training developments, base operations, real property maintenance, and headquarters management type activities.

Within Program 8, for example, the Army funds the Training and Doctrine Command (TRADOC). This command is responsible for Army-wide requirements for audiovisual and visually based instructional materials used for training individuals or units of the Army as a whole. Training Development activities, under TRADOC, produce resident and non-resident training programs and materials to meet the needs of the Army in the field as well as individual training at the Training Centers and Schools. TRADOC also funds combat development activities. The management of HQ, TRADOC is funded by Program 8 as is the real property maintenance (RPMA) and base operations (BASOPS) of all those posts designated as TRADOC installations. Although TRADOC installations may have tenants from other major commands, the RPMA and BASOPS are funded in Program 8.

Tables IX-2 and IX-3 show Navy and Marine Corps funding for individual training by category.

TABLE IX-2. Navy Funding of Individual Training
(\$ Millions)

	FY 89	<u>FY 90</u>	<u>FY 91</u>	<u>FY 92</u>	<u>FY 93</u>
Recruit	727.2	720.0	595.5	502.9	514.0
Off Acquisition	201.6	207.4	210.7	208.1	209.9
Specialized Skill	2,044.3	1,931.5	2,060.4	1,967.1	1,960.5
Flight	1,137.8	879.5	913.7	1,132.2	1,097.5
Professional	196.2	214.6	243.1	246.8	219.5
Medical Trng	51.8	60.4	68.5	46.4	46.2
Direct Trng Support	192.0	206.5	173.6	172.5	127.4
Trng Mgmt HQ	27.9	29.0	30.3	29.9	30.5
Trng Base Support	799.2	811.8	846.2	613.8	548.3
Reserve Pay & Allow	<u>61.0</u>	<u>48.3</u>	<u>44.1</u>	<u>43.4</u>	<u>45.7</u>
Total	5,439.0	5,109.0	5,186.1	4,963.1	4,799.5

TABLE IX-3. Marine Corps Funding of Individual Training for the Marine Corps by Type of Training and Fiscal Year
(\$ Millions)

	<u>FY 89</u>	<u>FY 90</u>	FY 91	<u>FY 92</u>	<u>FY 93</u>
Recruit	265.3	278.1	269.4	292.3	278.8
Off Acquisition	21.9	20.5	21.6	19.7	21.2
Specialized Skill	511.5	554.2	537.5	590.8	624.9
Flight	60.6	62.8	70.9	65.7	68.6
Professional	57.2	54.7	57.7	60.9	65.2
Medical Trng	0.0	0.0	0.0	0.1	0.1
Direct Trng Support	33.1	33.6	39.8	48.5	50.4
Trng Mgmt Headquarters	0.5	0.4	0.4	0.5	0.5
Trng Base Support	221.2	204.3	168.4	155.9	157.4
Reserve Pay & Allow	61.7	<u>92.8</u>	64.5	<u>71.6</u>	81.4
Total	1,233.0	1,301.4	1,230.1	1.305.8	1.348.5

The Air Force individual training costs by category are shown in Table IX-4.

TABLE IX-4. Air Force Funding of Individual Training
(\$ Millions)

	<u>FY 89</u>	<u>FY 90</u>	FY 91	<u>FY 92</u>	FY 93
Recruit	156.9	153.7	134.6	147.2	175.5
Off Acquisition	151.3	150.2	172.1	186.1	175.0
Specialized Skill	722.1	745.2	697.9	687.2	730.9
Flight	732.1	874.0	932.0	825.0	764.5
Professional	227.5	224.1	236.1	271.4	275.0
Medical Trng	80.5	85.7	88.2	82.2	50.5
Direct Trng Support	55.4	54.8	56.5	60.8	64.0
Trng Mgmt HQ	57.1	59.2	67.2	57.5	60.0
Trng Base Support	987.2	956.3	983.6	719.5	616.7
Reserve Pay & Allow	88.7	<u>76.8</u>	<u>81.7</u>	<u>118.9</u>	<u>127.1</u>
Total	3,258.8	3,380.0	3,449.8	3,155.7	3,039.2

The funding tables in this chapter include student and trainee pay and allowances as well as pay and allowances for the staff and support manpower for each Service's training schools. This can produce significant distortions in the use of these aggregates for assessing training efficiency (e.g., in the Marine Corps, significant loads are trained by Army and Navy schools). Appendix D shows a distribution of funds for individual training by Service and appropriation. Funding of individual training for all DoD components is shown by Service to include Defense medical training is shown in Table IX-5.

TABLE IX-5. Funding of Individual Training by Service and Type of Training (\$ Millions)

FY 1992	Army	<u>Navy</u>	<u>USMC</u>	Air Force	<u>Defense</u>	Total
Recruit	309.1	502.9	292.3	147.2	0.0	1,251.4
Off Acquisition	138.9	208.1	19.7	186.1	0.0	552.8
Specialized Skill	1,502.1	1,967.1	590.8	687.2	0.0	4,747.2
Flight	480.8	1,132.2	65.7	825.0	0.0	2,503.6
Professional	309.0	246.8	60.9	271.4	0.0	888.1
OSUT	307.5	0.0	0.0	0.0	0.0	307.5
Medical Trng	35.2	46.4	0.1	82.2	82.5	246.4
Acquisition Trng	0.4	0.0	0.0	0.0	0.0	0.4
Direct Trng Spt	582.5	172.5	48.5	60.8	0.0	864.3
Trng Mgmt HQ	56.3	29.9	0.5	57.5	0.0	144.2
Trng Base Spt	1,302.2	613.8	155.9	719.5	0.0	2,791.4
Reserve Pay & Allow	635.8	43.4	<u>71.6</u>	<u>118.9</u>	0.0	869.7
Total	5,659.8	4,963.1	1,305.8	3,155.7	82.5	15,166.9
FY 1993	Army	Navy	<u>USMC</u>	Air Force	<u>Defense</u>	Total
Recruit	326.7	514.0	278.8	175.5	0.0	1,295.1
Off Acquisition	143.1	209.9	21.2	175.0	0.0	549.1
Specialized Skill	1,459.5	1,960.5	624.9	730.9	0.0	4,775.7
Flight	468.5	1,097.5	68.6	764.5	0.0	2,399.2
Professional	275.4	219.5	65.2	275.0	0.0	835.1
OSUT	312.8	0.0	0.0	0.0	0.0	312.8
Medical Trng	36.6	46.2	0.1	50.5	101.6	234.9
Acquisition Trng	72.4	0.0	0.0	0.0	0.0	72.4
Direct Trng Spt	556.6	127.4	50.4	64.0	0.0	798.4
Trng Mgmt HQ	49.5	30.5	0.5	60.0	0.0	140.6
Trng Base Spt	1,121.5	548.3	157.4	616.7	0.0	2,443.9
Reserve Pay & Allow	<u> 588.5</u>	<u>45.7</u>	<u>81.4</u>	<u>127.1</u>	_0.0	842.7
Total	5,411.1	4,799.5	1,348.5	3,039.2	101.6	14,699.9

Funding estimates in this chapter include substantial segments of cost which are not normally sensitive to significant shifts (up to fifteen percent) in training load. These include certain command, base, facility, and equipment costs. These "fixed" costs need to be considered in program and budget adjustments because, within a reasonable range of output, they remain approximately the same and do not vary as the training load varies. They change, instead, with decisions to change the manner of accomplishing training, most often through training investment decisions or base realignments.

There are often substantial year-to-year fluctuations in funding for fixed costs. These costs are termed "fixed", not because they do not change from year to year, but because their changes characteristically are not "variable" with changes in workloads from period to period. Funding of these costs reflects significant increases for years in which there are major procurements such as simulators, aircraft, or construction in support of training.

Fixed cost has important implications on of funding adjustments for changes in the level of activity or size of a training program. If training funds are to be adequate for the needs of a reduced program, they must be reduced by a smaller proportion than the program loads in order to account for fixed costs. By the same token, program increases, within reasonable capacity limits, may not require a proportional increase in total program funding. Some training program costs are also strongly affected, in addition, by energy cost increases, especially in flight training.

APPENDIX A

DETERMINING TRAINING REQUIREMENTS

The following overview of the methodology for assessing and calculating training requirements is provided as a framework for understanding. As noted, details in calculation may differ to some extent among the Services and among the training categories.

Requirements

All training is accomplished to satisfy the need for personnel with certain types and levels of skills to man the approved or projected force. The Services, over the years, have developed detailed, systematic methods of determining the manpower needed to man and support the forces. The Defense Manpower Requirements Report discusses this process. From these force requirements for manpower the need for trained personnel with specific skills can then be derived. For example, a given force structure establishes the number of trained enlisted personnel needed. The number of authorized positions within that force structure for radar technicians establishes the basic requirement for trained personnel with that skill. This process is repeated periodically for all skills and skill levels for each Service, for both officer and enlisted skills. The total of all personnel in all skills needed to perform all the jobs in the force at a point in time represents the total requirement for trained manpower projected for that date.

Inventory Projections

The requirements identified through this process must be measured against the available assets, in terms of trained personnel on hand in each skill and skill level. From this asset base, estimates are made of how many trained personnel will be available at various points of time in the future. These estimates take into account probable rates of change to the current inventory -- through reenlistment, promotion, discharge, death, retirement, or other causes. These estimates are based on the best historical information available, tempered by judgment of how in the future personnel policies, the state of the economy, behavioral patterns, and other factors, many of them difficult to predict, will affect the probabilities that a trained individual will remain in the Service. A comparison of skill requirements and skill inventory projections, over time, establishes the extent of shortage or surplus likely to exist in each skill area by month and year. Adjusting the inventory may entail retraining personnel who are in surplus skills, but to a much greater degree, adjustment is likely to require the training of new accessions at entry level in shortage skill areas. The process places a demand on the personnel management and training establishments continually to analyze information about attrition as it occurs, by skill and skill level, in order to produce the right number of trained personnel with the proper skills needed to restore and maintain the balance of the skill inventory. The workload thus placed on the training establishment is detailed by graduates needed from courses of various lengths and is measured in terms

of average student load, or "training load."

Average Training Loads

Resources (manpower, money, and material) needed for any particular category of training vary with the number of students undergoing training at any given time. Facilities must be constructed and maintained to accommodate these students in training. The training establishment must maintain a sufficient staff of qualified instructors to conduct instruction for the "load" of students. Students and Trainees, as described in the "Individuals" chapter of the Defense Manpower Requirements Report, must be programmed to account for the fact that these personnel are in formal school training and are not available for duty with operational units. All of these personnel must be paid, housed, and supported. The basis for establishing these resource requirements is the "average training load."

The aggregate training load of courses of instruction within a given training category or subcategory is computed in accordance with the following formula, except as noted:

$$\frac{\text{Entrants} + \text{Graduates}}{2} \quad \text{X} \quad \text{Course Length}^{1/2} = \text{Load}$$

1/ Training time is expressed as a fraction of a year

Training load data is calculated by class and aggregated by course and training category. Fractions of carryover classes conducted during the year are included as though they were separate classes. However, individuals remaining in class at the end of a period are not counted as graduates, nor are individuals already in a class at the beginning of a period counted as entrants except for purposes of computing training loads for these fractions of courses.

The training load for a category or sub-category of training (e.g., Specialized Skill Training or Functional Training within that category) is the sum of the loads computed for all classes of courses within the category or sub-category. This formula is also used at the course level or training category level when detailed estimates by class are not available.

This method of computation implies "straight-line" attrition, that is, net class attrition occurs at a constant rate during a course. More detailed methods to calculate the impact of attrition for computation of load are used when better information is available. This is particularly true for high cost courses such as within flight training programs.

Since attrition varies for different training programs and is not always spread uniformly throughout the length of a course of training, determining training loads becomes a complex problem in estimation. This process of estimation involves two related factors.

First, across the spectrum of training programs that are within the scope of this report,

attrition varies from nearly zero to as high as 25 to 30 percent. Most officer Professional Development Education programs have practically no attrition. For FY 1992 and 1993, the Services estimate that about 10 percent of new recruits on a DoD wide basis will not complete Recruit Training because they will not have the mental or physical qualifications, or the motivation, for military life. Attrition rates in Specialized Skill Training vary widely, with the longer and more demanding courses tending to have higher losses. Pilot training is near the top of the scale in attrition. The higher rate of losses is based on lack of aptitude or motivation for flying, accidents and similar causes which are intensified in this type of training. While historical data provide a basis for projecting attrition rates for all types of training there is a considerable possibility for error based on variance in such factors as student quality and motivation.

A second necessary step in evaluating the effect of attrition is to estimate the phasing of attrition for each training program. In some courses, attrition tends to be higher in the early stages of a course when those less skilled or lacking motivation are discovered. In other courses, the bulk of attrition may occur toward the end of the course. The patterns of losses vary widely among types of training and over time. The complexities of the attrition variable make it necessary for the Services to use computer simulations in their training load calculations which take into account the rates and time-phasing of attrition.

An additional variation is introduced into the conceptual process of forecasting requirements and planning training loads as described above by the seasonal and cyclical nature of new accessions to the Services. Inputs to many of the more stable training programs -- Professional Development Education, Flight Training, the Service Academies, and the most advanced portions of Specialized Skill Training -- are readily predictable. Inputs to the training programs which are dependent on new accessions (Recruit Training and Initial Skill Training for graduates of Recruit Training) are considerably more volatile. The volume of inputs to these types of training depends on such intangibles as job opportunities in the civilian economy and the decisions of young people to enlist, delay enlisting, or not enlist. Moreover, enlistments are seasonal in nature, following a long-term pattern of "good" and "bad" recruiting months, where phased requirements may move independently of these seasonal patterns. As a result, training loads for the initial active duty training programs are generally based on a compromise involving the timing of predicted enlistments and the capacity of the training base as well as when the new personnel are needed to fill vacancies in the job structure. Most of the courses in these programs are relatively short, and program adjustments can readily be made.

APPENDIX B

SELECTED MAJOR COURSES/SKILL AREAS TRAINED IN OTHER SERVICES

Sponsoring Service	Major Interservice Course/ Skill Areas	Other Participating Services
Army	Construction Equipment Operator	Marine Corps
Army	Airborne	Navy Marine Corps Air Force
Army	Artillery	Marine Corps
Army	Armor	Marine Corps
Army	Explosive Ordnance Disposal	Navy Air Force Marine Corps
Army	Joint Tactical Communications Systems (TRI-TAC)	Navy Air Force Marine Corps
Army	Stinger/Redeye Missile	Navy Air Force Marine Corps
Army	Satellite Communications Fundamentals	Navy Air Force Marine Corps
Army	Tracked Vehicle Repair	Marine Corps Air Force
Army	Correctional Specialist	Navy
Army	Postal Operations	Navy Air Force
Army	Biomedical Equipment Specialist (Basic and Advanced)	Navy Coast Guard

Sponsoring Service	Major Interservice Course/ Skill Areas	Other Participating <u>Services</u>
Army	Behavioral Science Specialist	Air Force
Army	Medical Laboratory Specialist (Basic)	Marine Corps Navy Coast Guard
Army	Psychiatric Specialist	Navy
Army	Veterinary Specialist (Basic)	Air Force Marine Corps
Army	Laser Microwave Hazards	Navy Air Force
Army	Tropical Medicine	Air Force
Army	Respiratory Specialist	Navy
Army	Occupational Therapy Specialist	Air Force
Army	Advanced Digital Theory	Navy
Navy	Aviation Maintenance	Marine Corps
Navy	Flight Training	Marine Corps Coast Guard
Navy	Cryptologic Courses	Army Marine Corps Air Force
Navy	Diving	Army Marine Corps Air Force Coast Guard
Navy	Musician	Army Marine Corps
Navy	Explosive Ordnance Disposal	Army Marine Corps Air Force

Sponsoring <u>Service</u>	Major Interservice Course/ Skill Areas	Other Participating Services
Navy	Cryptographic Maintenance	Marine Corps Air Force Coast Guard
Navy	Teletype Maintenance	Marine Corps
Navy	Joint and Combined Planning and Operations	Army Marine Corps Air Force Coast Guard
Navy	Military Justice	Marine Corps Coast Guard
Navy	Shipboard Firefighting	Marine Corps Coast Guard
Navy	Corrosion Control	Coast Guard
Navy	Damage Control	Coast Guard
Navy	Supply Support	Marine Corps
Navy	Underwater Construction	Army
Navy	SERE, Code of Conduct	Marine Corps
Navy	Causeway Barge Ferry Train	Army
Marine Corps	Computer Systems, Program (IBM 360)	Army Air Force Navy
Marine Corps	Special Atomic Demolition Munition	Navy Army
Air Force	Navigator Training	Navy Marine Corps

Sponsoring <u>Service</u>	Major Interservice Course/ Skill Areas	Other Participating <u>Services</u>
Air Force	Tempest (Cryptologic Courses)	Army Navy Marine Corps
Air Force	Cryptologic Equipment Maintenance	Army Navy Marine Corps
Air Force	Precision Measurement Training	Army Marine Corps
Air Force	Aircraft Pneudraulic Repair	Army
Air Force	Weather Training	Army Navy Marine Corps
Air Force	Military Dog Handler	Army Navy Marine Corps
Air Force	Law Enforcement	Navy Marine Corps
Air Force	Fire Control Specialist	Army Navy Marine Corps
Air Force	Nondestruct Inspection	Army Marine Corps
Air Force	Defense Sensor Interpretation and Application Training	Army Navy Marine Corps
Air Force	Air Intelligence Training	Army Navy Marine Corps
Air Force	Lineman Training	Army Marine Corps

Sponsoring Service	Major Interservice Course/ Skill Areas	Other Participating <u>Services</u>
Air Force	Professional Comptroller	Army Navy Marine Corps
Air Force	Radio Communications Analysis	Army Navy Marine Corps
Air Force	Voice Processing	Army Marine Corps
Air Force	Cryptoanalysis	Army Navy Marine Corps
Air Force	Imagery Production	Marine Corps
Air Force	Composite Repair	Army Navy Marine Corps
Air Force	Graphic Specialist	Army Navy Marine Corps
Air Force	Nuclear Weapons Training	Army Navy Marine Corps
Air Force	Cable and Antenna Installation and Maintenance	Army Marine Corps
Air Force	Refrigeration and Air Conditioning	Navy
Air Force	Airlift of Hazardous Material	Navy Marine Corps Coast Guard

Sponsoring <u>Service</u>	Major Interservice Course/ Skill Areas	Other Participating <u>Services</u>
Air Force	Traffic Management and Accident Investigation	Army Navy Marine Corps
Air Force	AF Senior NCO Academy	Army Navy Marine Corps
Air Force	Wartime Planning Courses	Army Navy Marine Corps
Air Force	JAG Law Courses	Army Navy Marine Corps
Air Force	Engineering Application Courses	Army Navy
Air Force	Acquisition Education Courses	Army Navy Marine Corps
Air Force	Environmental Management Courses	Army Navy
Air Force	Housing Service Management Courses	Army Navy
Air Force	Contracting Management Courses	Army
Air Force	Quantative Management Courses	Army
Air Force	Systems Acquisition Management Courses	Army

APPENDIX C

INDIVIDUAL TRAINING WORKLOAD AND TRAINING STAFF AT MAJOR LOCATIONS BY TRAINING CATEGORY FY 1993

A. Recruit Training

Facility Location	Student Workload	Training S Military	Staff E/S Civilian
Army			
Fort Dix, NJ a/	0	0	1
Fort Jackson, SC	6,955	1,210	32
Fort Knox, KY	1,532	481	28
Fort Sill, OK	1,555	336	4
Fort Leonard Wood, MO	3,873	797	29
Navy			
Great Lakes, IL	4,355	439	9
Orlando, Fl	3,557	382	0
San Diego, CA	3,238	323	16
Marine Corps			
Parris Island, SC	3,894	747	6
San Diego, CA	4,760	703	2
Air Force			
Lackland Air Force Base, TX	5,717	294	5

Note: For all tables in Appendix C, Training Staff end strength (E/S) includes instructors, school staff, training center staff, and student supervisors. Manpower for training support, management headquarters, and base operating support is not included.

a/ Scheduled for Base closure FY 1993.

B. Officer Acquisition Training

Facility Location	Student Workload	Training Staff E/S Military Civilian
Army Fort Benning, GA	163	39 2
Fort Monmouth, NJ	9	$\begin{array}{ccc} 39 & 2 \\ 2 & 0 \end{array}$
West Point, NY	4,917	745 816
Navy		
Annapolis, MD	4,103	264 299
Newport, RI	332	66 12
San Diego, CA	272	14 2
Marine Corps		
Quantico, VA	394	218 3
Air Force		
Colorado Springs, CO	4,502	1,021 771
Lackland Air Force Base, TX	526	90 15

C. Specialized Skill Training

Facility Location	Student Workload	Training Sta Military	aff E/S Civilian
Army			
Aberdeen Proving Ground, MD	2,747	1,070	255
Fort Belvoir, VA	821	0	0
Fort Benning, GA	5,093	1,411	151
Fort B. Harrison, IN	2,466	515	101
Fort Bliss, TX	2,129	973	240
Fort Devens, MA	970	811	184
Fort Dix, NJ a/	0	0	0
Fort Eustis, VA	2,850	852	198
Fort Gordon, GA	7,538	1,773	458
Fort Huachuca, AZ	1,540	511	128
Fort Jackson, SC	2,589	688	61
Fort Knox, KY	2,786	1,072	257
Fort Lee, VA	6,855	795	95
Fort Leavenwoth, KS	875	113	8
Fort Leonard Wood, MO	2,854	1,605	224
Fort McClellan, AL	1,739	561	97
Fort Rucker, AL	1,075	247	117
Fort Sill, OK	3,175	1,069	253
Fort Monmouth, NY	238	83	28
Monterey, CA	3,796	222	982
Redstone Arsenal, AL	1,189	973	297
MDW Wash, DC (DLI)	61	0	0
Lackland AFB, TX	0	30 <u>b</u> /	Ŏ
Brooks Army Medical Ctr	232	190	63
Other Medical Ctrs/Hosp	63	6	1
Academy of Health Sciences	179	41	Ō
Cadet Academy	36	6	1

a/ Scheduled for Base closure FY 1993.
 b/ Instructors assigned to training facilities of another Service.

C. Specialized Skill Training (continued)

Facility Location	Student Workload	Training S Military	Staff E/S Civilian
Navy			
Athens, GA	215	60	11
Bangor, WA	365	438	26
Charleston, SC	630	919	8
Dam Neck, VA	1,361	1,276	5
Great Lakes, IL	3,978	1,518	60
Groton, CT	1,719	929	11
Gulfport, MS	301	144	11
Idaho Falls, ID	459	499	0
Indian Head, MD	154	98	Ö
Jacksonville, FL	475	249	0
Kings Bay, GA	251	467	25
Lakehurst, NJ	65	144	3
Little Creek, VA	384	173	8
Mayport, FL	182	120	2
Memphis, TN	3,553	912	170
Meridian, MS	743	120	12
Newport, RI	731	406	9
Norfolk, VA	1,672	1,260	90
Oakland, CA	37	10	10
Orlando, FL	3,177	785	18
Panama City, FL	277	191	8
Pearl Harbor, HI	309	251	8
Pensacola, FL	1,450	806	87
Philadelphia, PA	252	58	2
Port Hueneme, CA	300	153	7
San Diego, CA	4,925	3,172	118
San Francisco, CA	252	150	0
Schenectady, NY	494	634	0
Vallejo, CA	457	498	12
Windsor, CT	221	191	0
Whidbey Island, WA	127	97	2
Winter Harbor, MA	0	40	0
Other Training Detachments	891	0	0

C. Specialized Skill Training (continued)

Facility Location	Student Workload	Training Military	Staff E/S Civilian
Marine Corps			
Albany, GA	51	35	1
Camp Lejeune, NC	2,856	1,365	60
Camp Pendleton, CA	2,434	876	7
Parris Island, SC	32	17	0
Quantico, VA	579	1,163	24
San Diego, CA	252	117	0
Twentynine Palms, CA	1,726	625	90
El Toro, CA	133	30	0
Air Force a/			
Chanute Air Force Base, IL b/	2,837	741	274
Fairchild Air Force Base, WA	148	180	9
Goodfellow Air Force Base, TX	1,951	598	73
Homestead Air Force Base, FL	26	27	8
Keesler Air Force Base, MS	3,638	1,205	508
Lackland Air Force Base, TX	1,647	685	141
Lowry Air Force Base, CO c/	2,655	932	318
Sheppard Air Force Tech Base, T.		541	308
Sheppard Air Force Med Base, TX		469	59

a/ Includes Active AF, Civilian, ARF & Others; does not include field or contract training.

b/ Scheduled for Base closure in FY 1993.

c/ Scheduled for Base closure in FY 1994.

D. Flight Training

	Student	Training	Staff E/S
Facility Location	Workload	Military	Civilian
Army			
Army Fort Rucker, AL	1,418	1,050	380
1 010 1 100 100 1	,,,10	1,050	500
<u>Navy</u>			
Chase Field, TX	0	0	54
Corpus Christi, TX	292	168	13
Kingsville, TX	233	245	55
Meridian, MS	165	137	59
Pensacola, FL	767	533	138
Whiting Field, FL	880	520	34
Air Force			
Columbus Air Force Base, MS	261	346	22
Fort Rucker, AL	0	2	0
Lackland Air Force Base, TX	16	15	1
Laughlin Air Force Base, TX	263	336	10
Mather Air Force Base, CA	45	220	28
Randolph Air Force Base, TX	63	639	130
Reese Air Force Base, TX	216	346	23
Sheppard Air Force Base, TX	272	270	28
Vance Air Force Base, OK	249	350	16
Williams Air Force Base, AZ	69	345	20
Fairchild Air Force Base, WA	198	224	4
Homestead Air Force Base, FL	25	30	0
Eielson Air Force Base, AK	14	7	1

E. Professional Development Education

Facility Location	Student Workload	Training S Military	Staff E/S Civilian
Army			
Carlisle Barracks, PA	283	122	157
Fort Belvoir, VA	246	36	182
Fort Bliss, TX	668	267	18
Fort Leavenworth, KA	240	390	132
Fort McNair, DC	415	94	270
DoD Computer Institute, Navy Yard, DC	12	18	20
Navy			
Monterey, CA	1,800	58	296
Newport, RI	662	89	55
Norfolk, VA	249	15	45
Offshore	59	0	0
Marine Corps			
Kaneohe Bay, HI	57	13	0
Camp Butler, HI	113	17	0
Quantico, VA	765	115	88
Camp Lejeune, NC	462	28	0
El Toro, CA	323	27	Ö
Air Force			
Gunter Air Force Station, AL	272	78	9
Maxwell Air Force Base, AL	1,367	636	250
Wright-Patterson Air Force Base, OH	1,330	278	294

Note 1: Status above for USAF for FY 92 reflects FINPLAN and Presidential Budget inputs.

Note 2: USAF statistics above exclude: AFIT- AECP-245, AFIT- Medical-463

F. One-Station Unit Training (OSUT)

Facility Location	Student Workload	Training Staff E/S Military Civilian
Army		
Fort Benning, GA	4,046	875 21
Fort Leonard Wood, MO	1,425	337 19
Fort Sill, OK	987	599 49
Fort McClellan, AL	1,719	580 25
Fort Knox, KY	1,116	1,112 136

SUMMARY OF TOTAL FUNDING FOR INDIVIDUAL TRAINING AND EDUCATION BY SERVICE AND APPROPRIATION, FY 1991-1993 (\$ Millions)

APPENDIX D

Appropriation	<u>FY 1991</u>	FY 1992	<u>FY 1993</u>
Army			
Operations and Maintenance	\$2,304.2	\$1,849.1	\$ 1,844.1
Military Personnel	2,892.7	2,841.7	2,873.6
Reserve Personnel	276.4	333.9	323.7
National Guard Personnel	279.2	301.9	264.8
Aircraft Procurement	23.1	99.3	38.7
Missile Procurement	1.5	2.6	2.5
Procurement Weapons and			
Tracked Combat Vehicles	17.3	3.6	2.7
Other Procurement	39.7	51.8	61.0
Military Construction	<u>179.7</u>	<u>175.9</u>	_0.0
Total Army	\$6,013.7	\$5,659.8	\$5,411.1
Navy			
Operations and Maintenance	\$1,382.3	\$1,156.8	\$1,126.4
Military Personnel	3,154.5	3,031.1	3,042.7
Reserve Personnel	123.5	89.6	87.8
Aircraft Procurement	205.2	437.5	388.4
Other Procurement	168.0	152.4	128.0
Military Construction	<u>152.6</u>	<u>95.7</u>	<u>26.4</u>
Total Navy	\$5,186.1	\$4,963.1	\$4,799.5
Marine Corps			
Operations and Maintenance	\$154.2	\$155.7	\$154.2
Military Personnel	1,002.1	1,068.1	1,096.0
Reserve Personnel	68.2	75.9	85.9
Procurement	<u>5.7</u>	<u>5.9</u>	<u>12.4</u>
Total Marine Corps	\$1,230.1	\$1,305.8	\$1,348.5

<u>Appropriation</u>	<u>FY 1991</u>	FY 1992	FY 1993
Air Force			
Operations and Maintenance	\$1,272.0	\$1,012.7	\$ 991.5
Military Personnel	1,726.1	1,676.6	1,669.6
Reserve Personnel	35.5	58.4	62.4
National Guard Personnel	61.4	82.1	88.0
Aircraft Procurement	224.2	229.1	193.0
Other Procurement	17.5	32.8	17.1
Military Construction	<u>113.1</u>	<u>64.0</u>	<u>17.6</u>
Total Air Force	\$3,449.8	\$3,155.7	\$3,039.2
Defense Agencies			
Operations and Maintenance	\$38.5	\$ 81.7	\$101.6
Military Personnel	0.0	0.0	0.0
Procurement	<u>0.9</u>	<u>0.8</u>	<u>0.0</u>
Total Defense Agencies	\$39.4	\$82.5	\$101.6

APPENDIX E

COMPARISON OF TRAINING AND EDUCATION O&M FUNDING IN THE MMTR AND O&M BUDGET OVERVIEW

ARMY
Operations and Maintenance (O&M) Appropriation
Training and Education (Program 8)
(\$ Millions)

	FY 1991 Actual	FY 1992 Estimate	FY 1993 Estimate
Budget Overview (O&M Funding)	\$1,246.7	\$1,196.7	\$1,210.5
Audit Trail to MMTR			
Budget Overview: Senior ROTC	-101.0	-100.9	-97.5
Budget Overview: Training Support	-527.0	-451.5	-443.6
MMTR: Training Support	+373.9	+345.1	+318.5
MMTR: Base Operations Support	+1,311.6	+859.7	+856.2
MMTR (O&M Funding)	\$2,304.2	\$1,849.1	\$1,844.1

NAVY
Operations and Maintenance (O&M) Appropriation
Training and Education (Program 8)
(\$ Millions)

	FY 1991 <u>Actual</u>	FY 1992 Estimate	FY 1993 Estimate
Budget Overview (O&M Funding)	\$1,020.9	\$ 960.8	\$ 942.8
Audit Trail to MMTR			
Budget Overview: Senior ROTC	-56.0	-55.4	-56.4
Budget Overview: Training Support	-283.5	-287.3	-249.6
MMTR: Training Support	+175.8	+185.3	+140.7
MMTR: Base Operations Support	+525.1	+353.4	+348.9
MMTR (O&M Funding)	\$1,382.3	\$ 1,156.8	\$1,126.4

MARINE CORPS Operations and Maintenance (O&M) Appropriation Training and Education (Program 8) (\$ Millions)

	FY 1991 <u>Actual</u>	FY 1992 Estimate	FY 1993 Estimate
Budget Overview (O&M Funding)	\$81.8	\$84.4	\$84.5
Audit Trail to MMTR			
Budget Overview: Training Support	- 49.5	-48.1	-50.1
MMTR: Training Support	+39.6	+48.1	+50.1
MMTR: Base Operations Support	+82.3	+71.3	+69.7
MMTR (O&M Funding)	\$154.2	\$155.7	\$154.2

AIR FORCE
Operations and Maintenance (O&M) Appropriation
Training and Education (Program 8)
(\$ Millions)

	FY 1991 <u>Actual</u>	FY 1992 Estimate	FY 1993 Estimate
Budget Overview (O&M Funding)	\$729.9	\$670.4	\$660.7
Audit Trail to MMTR			
Budget Overview: Senior ROTC	-32.8	-27.7	-29.3
Budget Overview: Training Support	-68.7	-65.3	-67.2
MMTR: Training Support	+55.8	+52.0	+53.7
MMTR: Base Operations Support	+587.8	+383.3	+373.6
MMTR (O&M Funding)	\$1,272.0	\$1,012.7	\$991.5

TRAINING AND EDUCATION

O&M FUNDING BY CATEGORY BY SERVICE (\$ Millions)

	FY 1991 Actual	FY 1992 <u>Estimate</u>	FY 1993 Estimate
Recruit Training			
Army	35.2	22.2	20.7
Navy	4.9	4.6	4.8
Marine Corps	6.8	6.2	6.1
Air Force	3.3	<u>3.2</u>	3.9
Total	50.2	36.2	35.5
Specialized Skill Training			
Army	240.9	253.3	208.0
Navy	188.3	179.4	183.0
Marine Corps	21.1	24.6	21.9
Air Force	<u>162.7</u>	<u>156.7</u>	<u>150.3</u>
Total	613.0	614.0	563.2
Professional Development			
Army	95.3	95.4	56.6
Navy	52.5	52.5	53.4
Marine Corps	4.0	5.1	6.0
Air Force	51.4	67.3	62.1
Defense Agencies	38.5	39.0	0.0
Defense Health Program	_0.0	_0.0	<u>38.9</u>
Total	241.7	259.3	217.0
Officer Acquisition			
Army	41.1 (142.1)	42.1 (143.0)	45.5 (143.0)
Navy	57.9 (113.9)	57.5 (112.9)	58.5 (114.9)
Marine Corps	$0.2 \ (0.2)$	0.2 (0.2)	0.2 (0.2)
Air Force	<u>39.6</u> (72.4)	<u>43.5</u> (71.2)	43.1 (72.4)
Total	138.8 (328.6)	143.3 (327.3)	147.3 (330.5)

NOTE: Numbers in parentheses () are from O&M Budget Overview and include Senior ROTC which is not included in the MMTR funding tables.

	FY 1991 Actual	FY 1992 Estimate	FY 1993 <u>Estimate</u>
Flight Training			
Army	185.6	230.9	266.2
Navy	356.3	324.1	337.1
Marine Corps	0.2	0.2	0.2
Air Force	<u>353.9</u>	<u>288.1</u>	<u>304.8</u>
Total	896.0	843.3	908.3
Training Support			
Army	373.9 (527.0)	345.1 (451.5)	318.5 (443.6)
Navy	175.8 (283.5)	185.3 (287.3)	140.7 (249.6)
Marine Corps	39.6 (49.5)	48.1 (48.1)	50.1 (50.1)
Air Force	<u>55.8</u> (68.7)	<u>52.0</u> (65.3)	<u>53.7</u> (67.2)
Total	645.1 (928.7)	630.5 (852.2)	563.0 (810.5)
Armed Forces Health Profession	<u>nal</u>		
Scholarship Program	20.6	0.0	2.2
Army	20.6	0.0	0.0
Navy	21.5	0.0	0.0
Air Force	17.5	18.6	0.0
Defense Agencies	0.0	42.7	0.0
Defense Health Program	0.0	0.0	<u>62.7</u>
Total	59.6	61.3	62.7
Acquisition Training			
Army	0.0	0.4	72.4

NOTE: Numbers in parentheses () are from the O&M Budget Overview and include training support costs not attributable to the individual training conducted at schools.